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ABSTRACT

In 1961, San Francisco State College was selected by the United States Agency for International Development (USAID) to provide a contract group of educational technicians for Liberia in order to reorganize the administration and improve the educational system in the city of Monrovia. During the past 8 years, the College has provided 51 members of its faculty to the contract team, and advanced training has been provided on the College campus for 79 Liberians. The program has had two primary objectives: to assist in the development of a charter which would legally establish an intermediate level of school administration, and to train Liberian educators to administer and staff this intermediate unit. An on-going program of inservice education and instructional materials development has also been set up. Funds for the project were provided by USAID. (The program description includes the following supporting materials: "A Consolidated School System for Monrovia, Liberia--1961 Survey"; "Your Schools," a 1963 report of the problems and plans for future growth and development to meet Monrovia's and Liberia's educational needs; "Monrovia Consolidated School System Staff Analysis Study"; "Student Health Survey of Monrovia Consolidated School System.") (RT)

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ENTRY

for

American Association of Colleges for Teacher Education
Award for Excellence in International Education - 1970

Entry Title:	Monrovia Consolidated School Project
Location:	Monrovia, Liberia (West Africa)
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SP004988

SAN FRANCISCO STATE COLLEGE

MONROVIA CONSOLIDATED SCHOOL PROJECT
Monrovia, Liberia

Part I: Summary Statement

In 1961 the Secretary of Education of Liberia, recognizing that an intermediate administrative unit might be more efficient and effective for the city of Monrovia to facilitate more rapid improvement of the educational program, and that adequate school buildings were necessary to facilitate such an administrative unit, requested assistance from the United States Agency for International Development. USAID agreed to provide Liberia with a contract group of educational technicians, and further, would finance the construction of new school buildings in Monrovia through development grants and development loan funds. San Francisco State College was selected to provide the contract group of educational technicians.

The Monrovia Consolidated School Project is now within the final two years of its ten-year program. During this eight-year period San Francisco State College has provided fifty-one members of its faculty to the contract team representing 118 instructional years. Currently nine persons from the campus are working in Liberia. Liberian educators have augmented the project team from the outset which emphasizes the joint effort by Americans and Liberians. Joint selection by Liberian educators and San Francisco State faculty team members has resulted in advanced training on the San Francisco State College campus for seventy-nine Liberians representing 140-1/2

instructional years. Seventy-one have completed their training and have returned to Liberia. Of this number approximately fifty-five are presently working in the Monrovia Consolidated School System as teachers, curriculum consultants or administrators.

The Project has had two primary objectives; to assist in the development of a charter which would legally establish an intermediate level of school administration, and to train Liberian educators to administer and staff this intermediate unit. In 1965 the Liberian Legislature enacted a charter into law and President Tubman signed the enabling legislation. Progress toward the second objective has proceeded on several fronts. These fronts are as follows:

1. Built new physical plants and consolidated programs within new facilities and old ones which were adequate.

2. Upgraded qualifications of professional staff by providing advanced training at San Francisco State College.

3. Upgraded all professional and service staff through the development of an ongoing program of, and capacity for in-service training.

4. Established an administrative structure appropriate to the emerging functions of the district.

5. Established governance as close to the population served as the culture could accept. This meant the establishment of a council.

6. Initiated a process which would be ongoing for the development of a more relevant curriculum with more relevant instructional materials.

The United States Government through its Agency for International Development (USAID) has provided the necessary funds for the Project. This

amount has been $5,384,057 since May 1, 1962 up to the present date. The Liberian Government has provided the funds for the operation of the School System.

Part II: Explanation and Analysis

Development of the Program

From the start of the Project in June, 1962 until January 1, 1968, the major administrative and supervisory positions in the Monrovia Consolidated School System (MCSS) were held by advisors of the San Francisco State College Team (SFSCT). The project staff also included Liberians called project associates who served as school coordinators, consultants in special fields, e.g., guidance and counseling, administration of personnel and business services, and maintenance, warehouse, and clerical personnel. Though assigned to the project, the associates were employees of the Government of Liberia's Department of Education. The principals and teachers of the forty-seven school sessions in twenty-two buildings in Monrovia were also employees of the Department of Education.

The first formal step toward the organization of an integrated school system was the signing of a Memorandum of Understanding on February 28, 1963, which gave the SFSCT the authority to recommend action as to personnel re-assignments, budgets, supplies, maintenance, rehabilitation and security of buildings, transportation and modifications of curriculum and instruction. The authority to implement the recommendations was assigned to the Under Secretary of Education for Instruction. The Directors of Elementary and

Secondary Education in the Department of Education retained their responsibility for general policy regulations and the evaluation of schools. In effect, under this agreement the Team had responsibility for operating the schools while the Department of Education retained control of personnel and fiscal policy and procedures.

Development of personnel policies began with a survey to identify teachers and their assignments. Personnel records were then prepared for both placement and salary purposes. Development of policies regarding such matters as job descriptions, recruitment, leaves and dismissals were only partially established. An analysis of the level of training of teachers indicated a need for continuation of schooling for those at lower levels of training - high school diploma or less - as well as in-service training for all. Salary schedules were developed by the SFSCT early in the project to regularize and improve salaries. Most of the proposals were not accepted or were materially reduced by the Department of Education.

Pupil accounting was started early. Also a study of enrollment trends was made as a basis for long-range planning of budgets, facilities, supplies and staffing. In 1963 a study of the characteristics and aspirations of 237 students in grades 6, 9, and 12 was made as one source for curriculum modifications.

Budgets were prepared each year by team members. From 1965 on, Liberian staff members joined team members to form a budget committee. Accounting for expenditures was difficult because all disbursements were

processed through the Department of Education.

A milestone was reached in 1967 when the Charter for the Monrovia Consolidated School System was implemented by the appointment of a Council followed by the selection of appropriate Liberian staff, including a Superintendent of Schools. It was at this point that the members of the SFSCT became strictly advisory and the Liberians became operational.

Basic Data

The following hard-data will define the basic scope of San Francisco State College's operations:

1. Enrollment in Monrovia Government Schools has increased as follows:

	1963	1969
Elementary (grades 1-6)	8,300	13,254
Secondary (grades 7-12)	1,020	3,498
Total	9,320	16,752

2. Nearly every employee of the Monrovia Consolidated School System has participated in programs of in-service training. Further the capacity of MCSS to carry this on with its own resources has been clearly demonstrated.

3. Since the project began, the Government of Liberia has built one new elementary school from its own cash funds and has built one other elementary school, one junior high school, and one senior high school with loan money provided by USAID. One self-help elementary school was also built. These new buildings with a combined single session enrollment capacity of more than 3,700 pupils have made it possible to abandon many inadequate buildings and to consolidate for more effective programming.

4. An administrative structure has been established and adjusted by Liberians to meet their needs and perceptions.

5. A superintendent with an entire administrative staff has been appointed and a council has been appointed which has shown its ability to be an effective voice in the interest of the school system.

6. In 1963 one building principal possessed an M.A. degree, today every building principal in the system holds an earned M.A. from an American institution of higher education. No Liberian institution of higher education offers work beyond the B.A. degree.

7. Numerous instructional materials have been developed, numerous research projects have been conducted, and many curriculum innovations have come about. Moreover, the most significant of these have been done by Liberians themselves, and this capacity remains.

8. In 1963 the Government of Liberia had a budget of $494,000 for schools in Monrovia, in 1970 they adopted a budget of $977,658.

9. The contract team, anticipating its own phase-out, began without pressure from USAID or the Government of Liberia the process of disengagement.

As impressive as the results may seem, particularly in light of their agreement with stated objectives, by themselves they do not capture the wholeness of the project. The key objective was not any one or even the total of all of the above items. The key objective was to <u>institutionalize enabling processes</u> for a local social innovation. Even though it has been extremely difficult to communicate about this key concept to interested parties, <u>PROCESS</u> has been the aim, not products as such. The Team has not been aiming for a specific number of books of a certain kind, but rather aiming to leave Liberian writers who had the means and motivating conditions to continue the process. The interest has not been in a particular curriculum but in developing Liberian curriculum makers who would have the means and the institutional conditions and expectancies which would force them to con-

tinue to build what they saw as a Liberian curriculum. SFSCT has not been interested in building a specific institutional structure. It wanted only to catalyze activity and to assist Liberians to develop the means of creating a structure which would serve their needs. In short, San Francisco State College wanted to help Liberians build a new social institution which they could accept and which would have meaning for them.

What Makes the Monrovia Consolidated School Project Unique

We feel that the uniqueness of the project can be summarized as follows: We have learned of no other project in which a process rationale was explicated and which became the foundation for institution building. Secondly, the team of consultants has engaged in a reflective process of their own which includes a heavy component of ongoing evaluation. This has enabled us to respond more effectively and realistically to the dynamic situation as it develops in the Monrovia Consolidated School System. We have found that it is not possible to write the plan at any given point which would hold for American helpers who are essentially strangers or for our Liberian colleagues who are meeting realities which we cannot even understand. These realities in the Liberian culture which can be perceived and responded to only by Liberians are shaping forces for what is still becoming the Monrovia Consolidated School System. Finally, we feel that our project is unique in that it gives great weight to an emerging definition of a consulting role in a foreign culture. Time will not permit a treatment of this concept here. However, it can be said very strongly, that no matter what kind of help is

to be provided, ultimate success depends less upon the expertise of the helper than upon the conditions or relationships under which help is offered. We believe that we have found and are using a few helping ways and are still open to finding others.

Certainly, these comments would be nothing more than theoretical notions except for the fact that we do have the concrete results which have been stated earlier. The real test will come when someone looks at the Monrovia Consolidated School System years hence to see if the adaptive processes are still in motion. However, for those of us who have been close to the project, we already know that our Liberian colleagues have had processes going from the moment they took the full responsibility for the operation of the system some three years ago.

Conclusion

In conclusion, we can say with assurance that the Monrovia Consolidated School Project has meant that a greater number of children in the capital city have access to a higher quality of educational experience than before, and that the capacity for an even greater increase is present. We have already seen the positive impact on the national education picture in Liberia. Curriculum has been influenced by Monrovia Consolidated School System innovations. MCSS staff provide leadership which is constantly used by the Department of Education. The Government of Liberia continues to support the system with nearly one-sixth of its total national budget for education. What the system will be is Liberian business. We are pleased that we have had an opportunity to contribute to the beginning of the development of a process.

MONROVIA CONSOLIDATED SCHOOL PROJECT

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YOUR SCHOOLS

4984

A report of the problem and plans for future growth and development to meet Monrovia and Liberia's educational needs

10

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MONROVIA CONSOLIDATED SCHOOL PROJECT

PROJECT GOALS

PROJECT GOALS

In describing the Monrovia Consolidated School Project, two distinctive features should be noted at the outset: (1) its large scale, and (2) its complexity. Rapid population growth of the city has far outstripped school facilities. Consequently large numbers of people with little or no schooling fill the town. They continue to arrive, hopeful but impoverished, capable of little contribution to the economy and aggravating the hazards of social deterioration which accompany rapid urban growth. From the first conception of the project, it has been clear that a massive effort on many fronts would be required to overcome the educational lag and prevent the situation from becoming worse.

The project may be described in reference to six goals:

1. An improved instructional program
2. Increased enrollments
3. More efficient school buildings
4. Increased operating funds
5. Better trained staff
6. A new administrative System

The basic purpose of the project stated in the first two goals, is simple: better schooling for more children. The other four goals are instrumental, necessary to attaining the first two. These six goals are all inter-related and must be pursued simultaneously. Delay in any of them slows down progress toward the others. Hence the complexity of the project and the variety of activities required to move all its parts together.

The first five goals can all be stated in terms of more and better--the further development of what is already present. The sixth goal, however, is different. The goal of a new administrative system will be realized in the creation of something which does not exist at present. It means the formation of a new legal entity--a unified city school system embracing metropolitan Monrovia, with its own administrative organization and services. This is the central goal which unites the others and will make them possible. From it comes the name: Monrovia Consolidated School System.

MONROVIA CONSOLIDATED SCHOOL PROJECT

POPULATION GROWTH & ENROLLMENT GOAL

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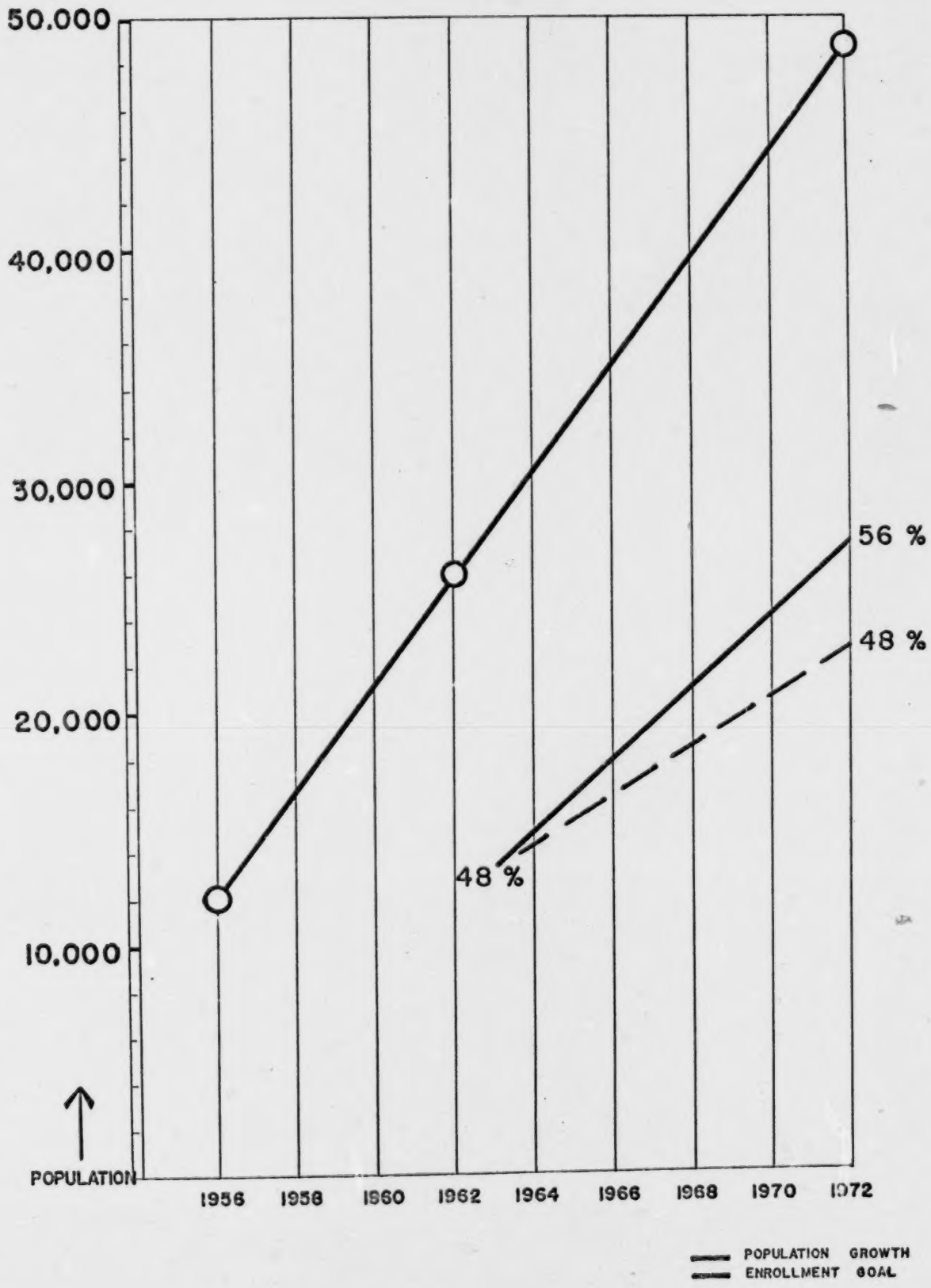


STUDENT PERSONNEL CONSIDERATIONS

School Age Population Projections

A look at the Monrovia population, ages 6-19, places the school problem in proper perspective.

1956 Official census	- ages 6-19	=	12,000 approx.
1962 Official census	- " "	=	26,000 "
1972 Projected estimate	- " "	=	48,000 "

The 1972 projected estimate results from a straight line projection since there is no conclusive evidence for either an accelerating growth curve or a decelerating curve.

Now, in 1963, only 48% of the 6-19 population are in school. This figure includes both government and non-government schools. The comparable percentage for the age 6-14 population is currently 59%.

If the present building proposals can become reality by 1972, only 56% of the age 6-19 population will be in school. This represents a gain of only 8% against the current 52% of the 6-19 population not attending school. The enrollment of ages 6-14 would have increased to only 69%. (The reader is reminded again that the percentages stated above DO include non-government and government schools.) Even though non-government schools will experience actual growth, their percentage share of the population will diminish since the population will grow at a much faster rate.

Enrollments, Current and Projected (government schools only)

1963	elementary (grades 1-6)	=	8,300	(Current 1st graders range from
	secondary (grades 7-12)	=	1,020	age 5 to 24.)
	total		9,320	
1972	elementary (Grades 1-6)	=	14,200	(Projected 1st graders will range in
	SPECIAL TEENS	=	2,400*	age from 6-14)
	secondary (Grades 7-12)	=	5,500	
	Total		22,100	

*The SPECIAL TEENS program will provide a special curriculum for elementary students age 15 and up who entered school at a late age. The program, housed in the secondary building, will attempt to develop "saleable skills" in a relatively short period of time. This program will be started as soon as the first secondary building is completed.

STUDENT PERSONNEL CONSIDERATIONS (Continued)

The following comparisons are of interest:

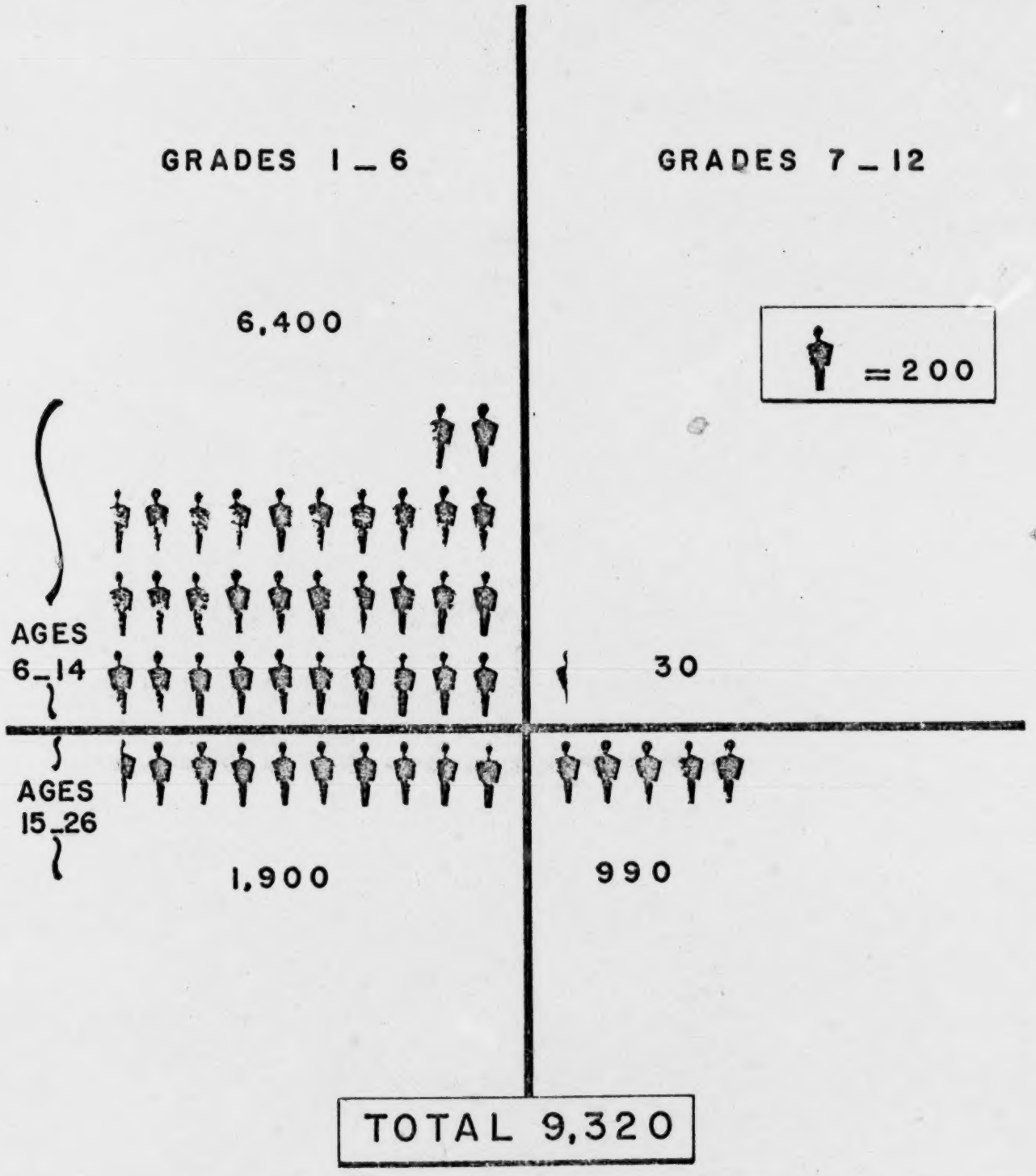
1963 elementary: secondary ratio = 8:1
1972 elementary: secondary ratio = 3:1
While elementary enrollments will not quite double between 1963-72, secondary enrollments of regular students in grades 7-12 will increase five times.

It must be emphasized that to hold enrollments down to 56% will require carefully administered screening and selection procedures. The demand is expected to far exceed facilities. The 1972 goals stated above represent a considerable paring down of previous goal projections in order to fit a building schedule more in keeping with anticipated G O L financial prospects.

MONROVIA CONSOLIDATED SCHOOL PROJECT

1963 ENROLLMENT

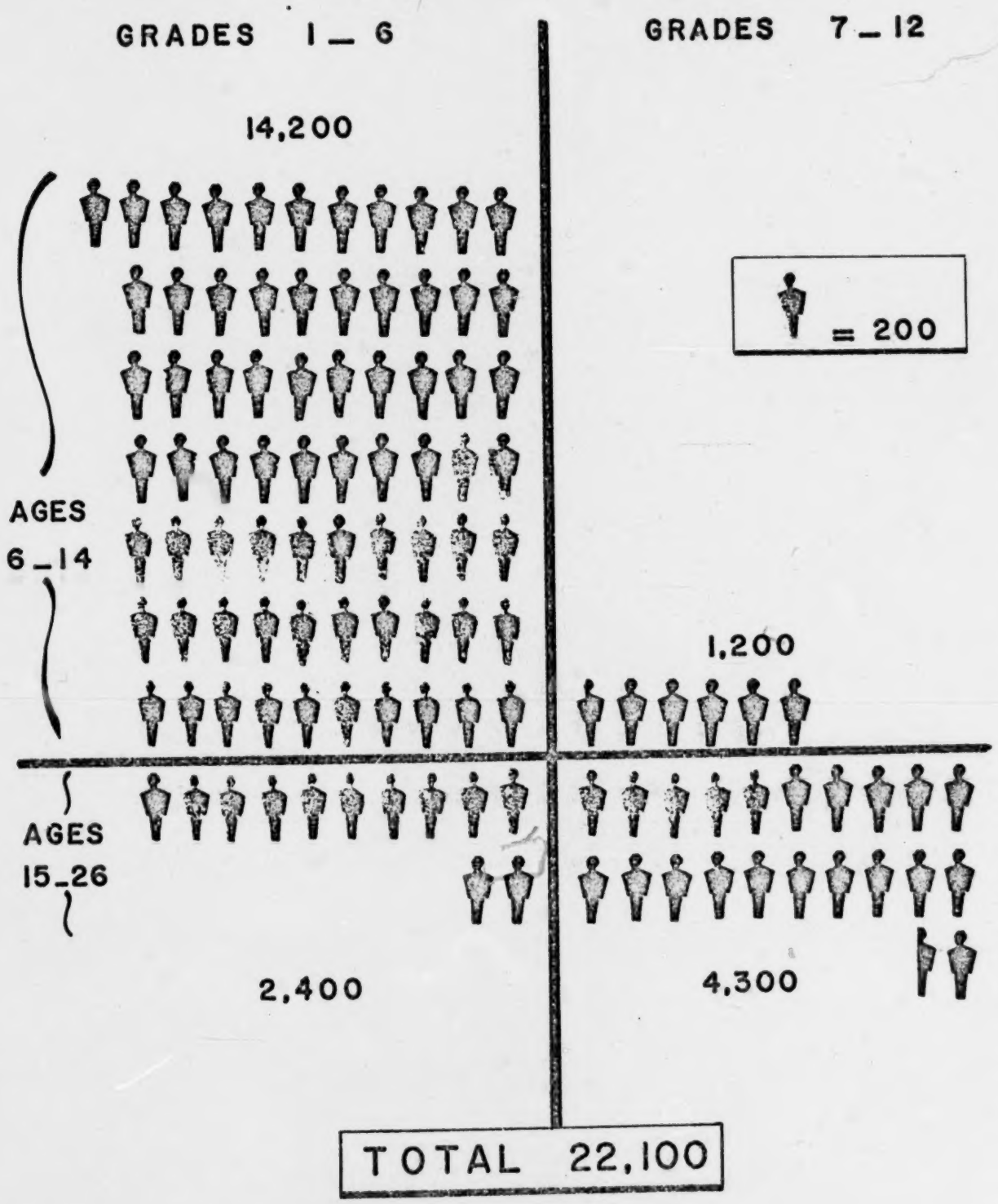
MONROVIA PUBLIC SCHOOLS



MONROVIA CONSOLIDATED SCHOOL PROJECT

1972 ENROLLMENT

MONROVIA PUBLIC SCHOOLS



PROFESSIONAL PERSONNEL AND TEACHER TRAINING

As of April 1963 the level of training of teachers in Monrovia was as follows:

Number of Teachers	Level of Training
6	8th Grade or less
54	1, 2, or 3 years of High School
62	High School Diploma
67	1, 2, or 3 years of College
67	Bachelor's Degree
9	Master's Degree

Salary, based on training only, since no recognition is given for years of teaching experience.

Monthly Salary (12 months per year)	Level of Training
$ 30.00	One year of High School or less
40.00	Two, three, or four years of High School, but no Diploma
50.00	High School Diploma through one year of College
60.00	Two, three, or four years of College, but no Degree
100.00	B. A. Degree
125.00	B. S. in Education Degree
200.00	Master's Degree

Principals receive an additional $10.00 per month. ($5.00 with High School Diploma or less.) Teachers in the Elementary Demonstration School, with Bachelor's Degrees, receive $150.00 per month.

During the current semester (second semester of 1963) there are 336 elementary and secondary teachers, and school administrators in the Government Schools in Monrovia. By 1972 it is estimated that there will be a need for approximately 700 classroom teachers (476 elementary and 224 secondary) in the Monrovia Consolidated Schools.

In-service training and upgrading of personnel is being carried on through the following activities:

Professional In-Service Training

A pilot workshop was held for teachers and principals representing five elementary schools. The workshop met 25 times for a total of 37½ hours.

PROFESSIONAL PERSONNEL AND TEACHER TRAINING (Cont.)

In addition to the meeting times, the instructional staff supervised each teacher in his or her classroom at least twice each week. Each teacher was given consumable instructional materials for his class during the workshop.

Additional workshops, seminars, and extension classes are being planned for the future. With the exception of potential extension courses being offered in cooperation with the University of Liberia, the in-service work is not expected to advance teachers toward their next highest degree or diploma.

Professional Associates

Five Liberian educators are assigned by the Liberian Department of Education to the San Francisco Team. These educators carry full responsibilities for various phases of the project. Over a period of time each one will be given experience in various areas of educational administration. It is expected that the top administrative posts in the Monrovia Consolidated Schools will eventually be assigned to people who have had experience as Professional Associates.

Requests are being submitted in the 1964 budget for eleven additional Professional Associates for next year.

Participant Training

Liberians are selected for advanced training at San Francisco State College to provide the Monrovia Consolidated School System with professional leaders, teachers, and skilled non-professional personnel. This program also makes it possible to provide initial training in some areas in which there are no training programs available in Liberia. When these people return to Liberia, it is expected that they will serve as instructors in the in-service teacher education program as well as administrators, supervisors, and teachers in the classrooms of the elementary and secondary schools. At the present time there are 28 people in San Francisco, and by the Fall of 1965 a total of 57 people will have been selected for this program. Present areas of study include Business Education, Home Economics, Industrial Arts, Elementary and Secondary Administration, Elementary Curriculum, Mathematics, Science, Guidance and Counseling, Vocational Education, Language Arts, Physical Education, Library Science, and Maintenance and Custodial Supervision.

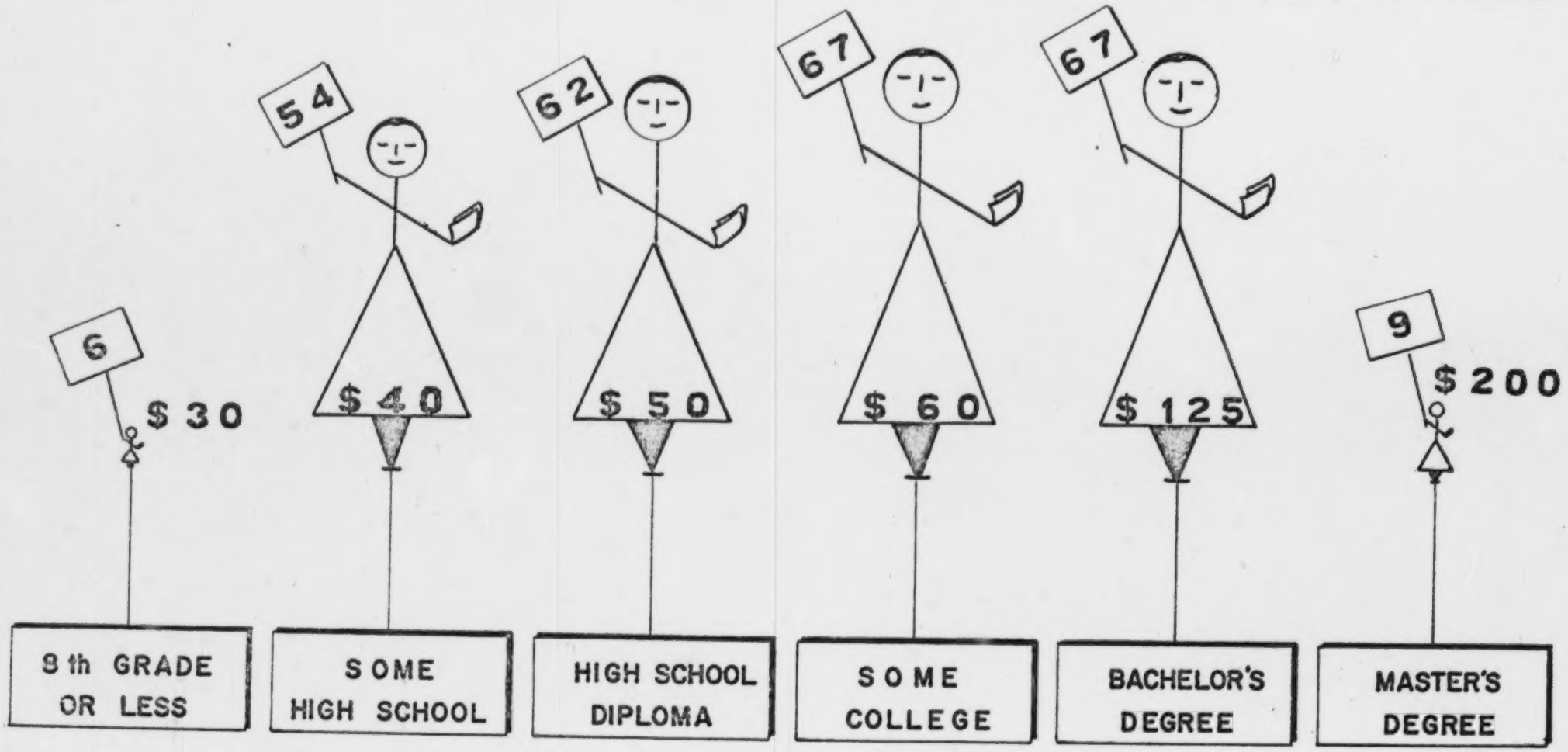
PROFESSIONAL PERSONNEL AND TEACHER TRAINING (Contd.)

Secretarial and Maintenance Associates

Like the Professional Associates, these associates are assigned by the Department of Education to the San Francisco Team. They carry full responsibilities for their assigned jobs under the supervision of American members of the Team. In addition to learning on the job, a planned instructional program is carried on each day during the working day to improve their competencies. The instructional program for the Secretarial Associates presently includes classes in typing, shorthand, office procedures, filing, and duties relating to the specific jobs required of school secretaries.

PROFESSIONAL PREPARATION

OF MONROVIA TEACHERS



PROFESSIONAL

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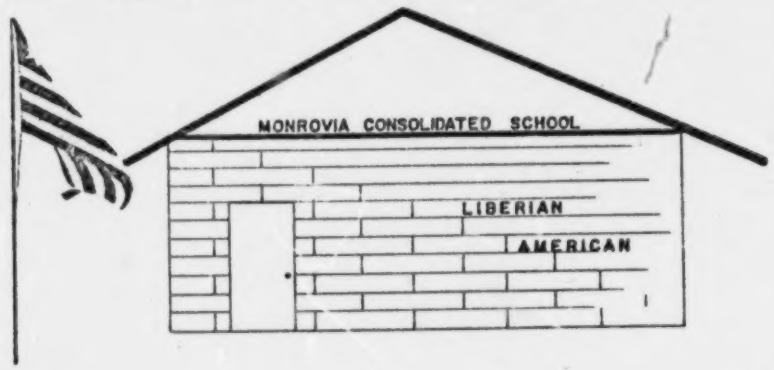
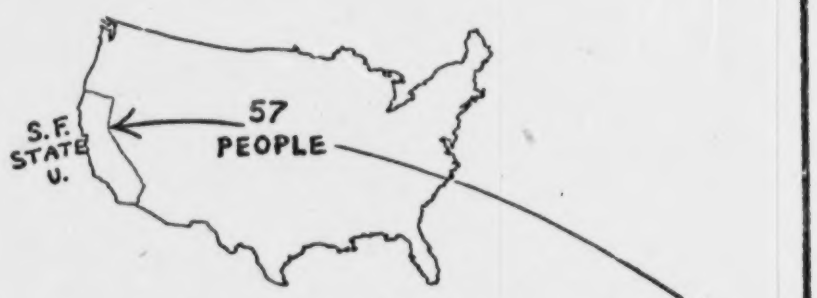
PROFESSIONAL



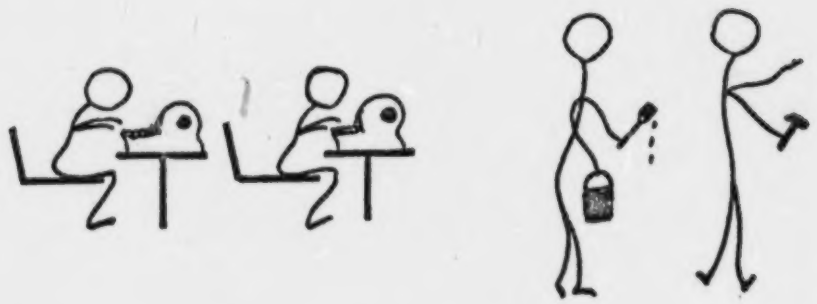
ASSOCIATES

PARTICIPANT



TRAINING

SECRETARIAL & MAINTENANCE



ASSOCIATES

MONROVIA SCHOOLS BUILDING PROGRAM-1963/1972

1963

At the present time there are forty-one government school sessions operating in twenty-five buildings. They are distributed thus:

	Grades 1-6	Grades 7-9	Grades 9-12	Grades 7-12
Morning	17	1	1	
Afternoon	13	1	1	
Evening	6			1

The 9,300 students are in sessions which range in size from 100 to 550.

Of the twenty-five buildings used as schools, only three were designed as school buildings. These are the only buildings owned by the Government. One more building, loaned by the University of Liberia, houses two of the high schools. 1,800 students are housed in these four buildings; 7,500 in the other twenty-one. The other buildings are houses, apartments, churches, warehouses, and even a palm frond hut, all of which are leased from private owners. These buildings are used without any modifications. The houses and apartments have rooms which permit separation of grades, but the warehouses and churches do not. In this housing several grades are taught in large, single rooms. For example, 250 primary students are housed in a chapel about forty by sixty feet. The roofs of many of the buildings leak so badly that school must be dismissed on rainy days.

1964

Tentative approval has been given by the government for the rehabilitation of the three government owned buildings through new roofs and new floors, and installation of windows and toilet facilities. It is hoped that these repairs can be effected by 1964. In rehabilitated form each of these buildings can house 325 students in each session, for a total of 1,950 students on double session.

Contracts for this rehabilitation are now in the last stages being handcarried through the twenty-six departments required for approval. Each of the three contracts is for about $5,000. The team member handcarrying these contracts has spent three months in the process, but the government has not yet ascertained the availability of adequate funds.

MONROVIA SCHOOLS BUILDING PROGRAM-1963/1972 (Contd.)

Grades 1-6

The present building program anticipates the construction of six new elementary schools to be completed in 1965. Three are ten-room and three are fourteen-room buildings. These six buildings are designed to house 2,580 students in each session. With these six and the three rehabilitated buildings 7,100 students can be housed on double sessions. By 1965 it is estimated there will be 7,300 students between the ages of six and fourteen in grades one through six. These buildings will permit the housing of all regular elementary students in nine adequate buildings.

Grades 7-12

The present building program anticipates completion of the new junior-senior high school in 1965. This is a school plant designed to house 1,200 students in each session.

By 1965 it is estimated there will be 1,400 regular secondary students in grades seven through twelve and 2,100 more secondary-age students eligible for special programs. Plans are to house these 3,500 students in the new junior-senior high school. This will permit housing all secondary students in adequate facilities and will release badly needed facilities to the University of Liberia.

1968

Grades 1-6

In 1968, by conservative estimate, there will be 10,300 students between the ages of six and fourteen in grades one through six. With the planned completion of two elementary schools in 1966, one in 1967, and one in 1968 there will be a total of thirteen government elementary schools capable of housing 5,000 students in each session.

Grades 7-12

In 1968, by conservative estimate, there will be 2,200 regular secondary students and 2,600 more secondary-age students eligible for special programs. With the planned completion of a second junior-senior high school in 1968 capable of housing 1,000 students in each session, there will be two government junior-senior high schools capable of housing 2,200 students in each session.

1972

Grades 1-6

In 1972, by conservative estimate, there will be 14,000 students between the ages of six and fourteen in grades one through six. With the construction of one school each year in 1969 through 1972, there will be a total of seventeen government elementary schools designed to house 7,000 students in each session.

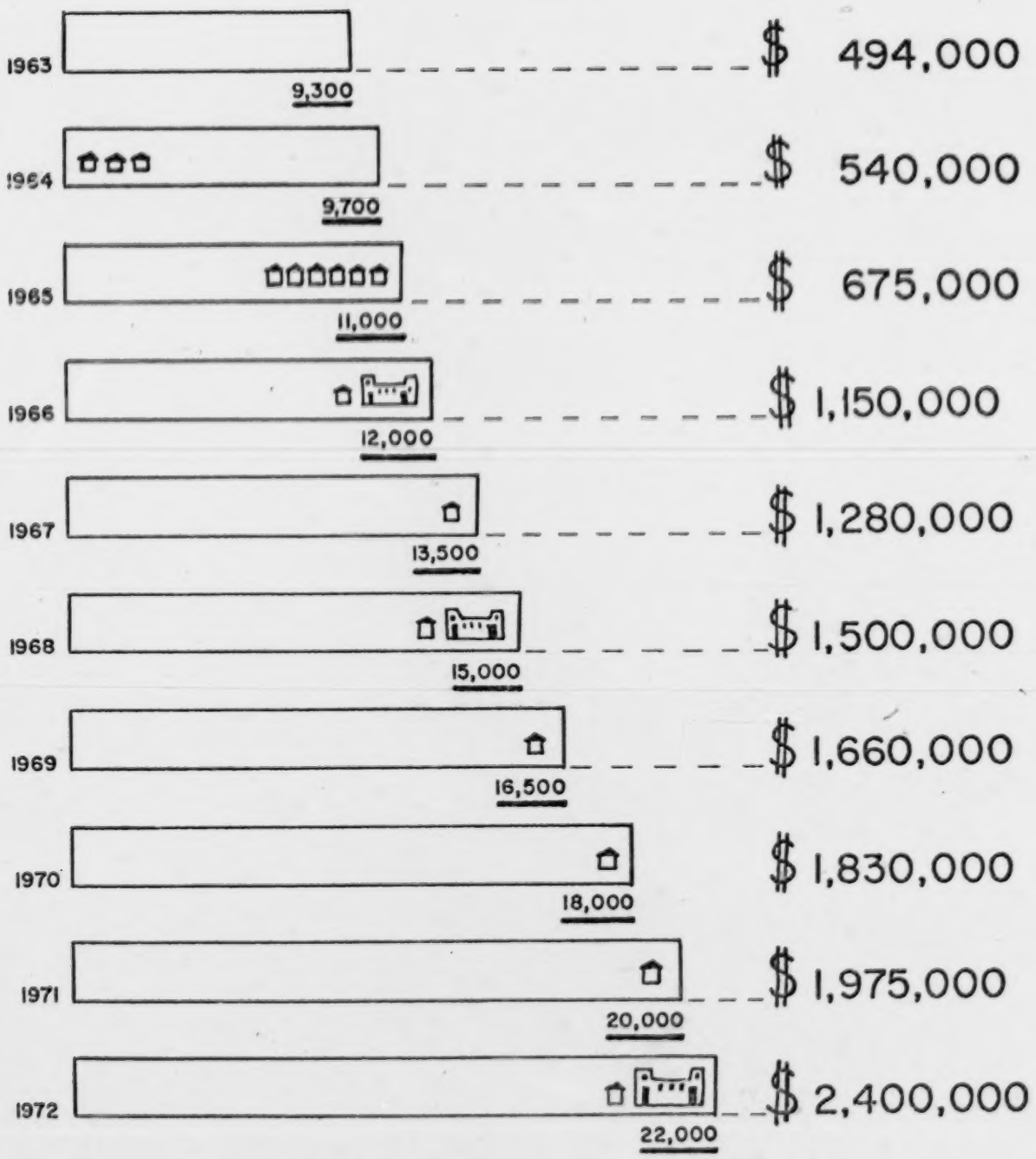
MONROVIA SCHOOLS BUILDING PROGRAM-1963/1972 (Contd.)

Grades 7-12

In 1972, by conservative estimate, there will be 5,500 regular secondary students and 2,400 secondary-age students eligible for special programs. Completion of a third secondary school in 1972 will afford housing for 3,200 students in each sessions.

MONROVIA CONSOLIDATED SCHOOL PROJECT

SCHOOL BUILDING PROGRAM & OPERATING COSTS



ANNUAL OPERATING COSTS-1963-1972

Each year the Government of Liberia will need to meet increased annual costs for the operation of the Monrovia schools. In 1963 the Government will have spent an estimated $494,000 to pay the 325 teachers in the Monrovia schools, to provide minimal instructional materials to 9,300 students, to provide minimal maintenance for three government owned buildings, and to pay rental on twenty-two buildings not maintained.

By 1968 the Government will need to spend $1,500,000 on Monrovia schools to pay teachers, provide instructional materials and supplies, and to maintain buildings. And by 1972 it will cost the Government $2,500,000 annually to support the Monrovia schools, to pay more than 700 teachers, to provide instructional materials and supplies for 22,000 students, and to maintain seventeen elementary and three junior-senior high schools.

These cost estimates are based on some of the following specific estimates: The average teacher's salary in 1963 is $850: in 1972 it will probably be $1,300. There are now 325 teachers and administrators for 9,300 students; in 1972 there will probably be 700 for 22,000 students. Each elementary building will cost between $65,000 and $75,000 annually to staff and maintain. Each secondary building will cost between $200,000 and $225,000 annually to staff and maintain.

By 1972 the Government of Liberia will need annually to spend approximately $1,700,000 on teachers' salaries in Monrovia alone, $200,000 on instructional materials, $100,000 on custodial, maintenance, and office staff, $300,000 for operation and maintenance, $100,000 for food and health services, and $100,000 for building loan payments. The GOL must decide whether it will be able to expend these amounts of monies to maintain the minimal program that is projected.

PRESENT INSTRUCTIONAL PROGRAM

Teaching Conditions

All buildings including the three constructed for school use, are in need of major repair and rehabilitation. Several school structures present serious hazards to life and limb. Running water is available to six schools. More than 7,000 elementary children must share 31 toilets of which only 21 were in working order in April, 1963. The toilet and water facilities for the 1,020 secondary students are slightly better. Desks and storage facilities are almost non-existent. Class loads are reasonable (median ratio 1:30), but more than 1,600 children receive instruction in large rooms simultaneously with five or six other class groups. No school can be secured from robbery and from destructive occupancy by the general public.

Materials

An elementary course of study was published in 1960. From time to time curriculum guides for elementary and secondary programs have been published. These materials lack application to the Liberian situation. Few Liberian teachers were involved in their development. Seldom are these materials easily available to teachers in the classroom. Books and materials do not exist for the implementation of the course of study and curriculum guides. A disorganized collection of American textbooks is available to some children. In most schools pencils, papers, chalk, and other instructional supplies have been in such short supply that they might be considered non-existent. An occasional CARE map appears in a classroom. Audio-visual and science equipment is not provided. The lack of security discourages teachers from attempting to develop their own equipment and materials. Distribution of minimum supplies (paper, pencils, and chalk) has just been initiated by the Monrovia School Team.

Teacher Ability

Many teachers do not know what should be taught. They are unable to determine the levels at which children can work. Teachers have received very little help or supervision. The teaching staff with very few exceptions will have to be retrained in order to upgrade content areas as well as teaching skills. Absenteeism is high among teachers. In three or four fair-sized school sessions, the children received the same amount of instruction when the teacher is absent as when she was present.

The exists a number of competent and dedicated teachers and principals. The established personnel procedures do not insure within reasonable limits that the most qualified person will be appointed to a key position.

PRESENT INSTRUCTIONAL PROGRAM (Contd.)

Appointments are often made for reasons other than professional competency. It is not unusual for a principal to have teachers assigned to his building who have more power to determine their duties than he does. Teaching and serving children is not first priority with too many teachers and administrators.

Pupils

The current first graders range in age from 5 years to 24 years. General level of retardation is estimated by the Consolidated School Team at approximately 3 to 4 years. 1,900 youth about the age of 14 years are presently attending elementary school programs. Observation and preliminary testing indicate that the pupil population has the same ability to learn as a like-sized group of American children. Although no accurate data exist, it is suspected that over 90% of the children need more to eat in order to develop the energy to profit from a good instructional program. Illness and disease account for much loss of school time and low levels of energy outputs. The same health problem exist for a large number of teachers. Any improved instructional program will fail unless attention is given to the dietary and health problems existing in the pupil population. The majority of the children are learning English as a second language. Some schools such as those in the Kru Town area must introduce English to children for the first time. These children do not hear English in their homes. The school, the radio, and the market place are the only English models available to them.

Supervision

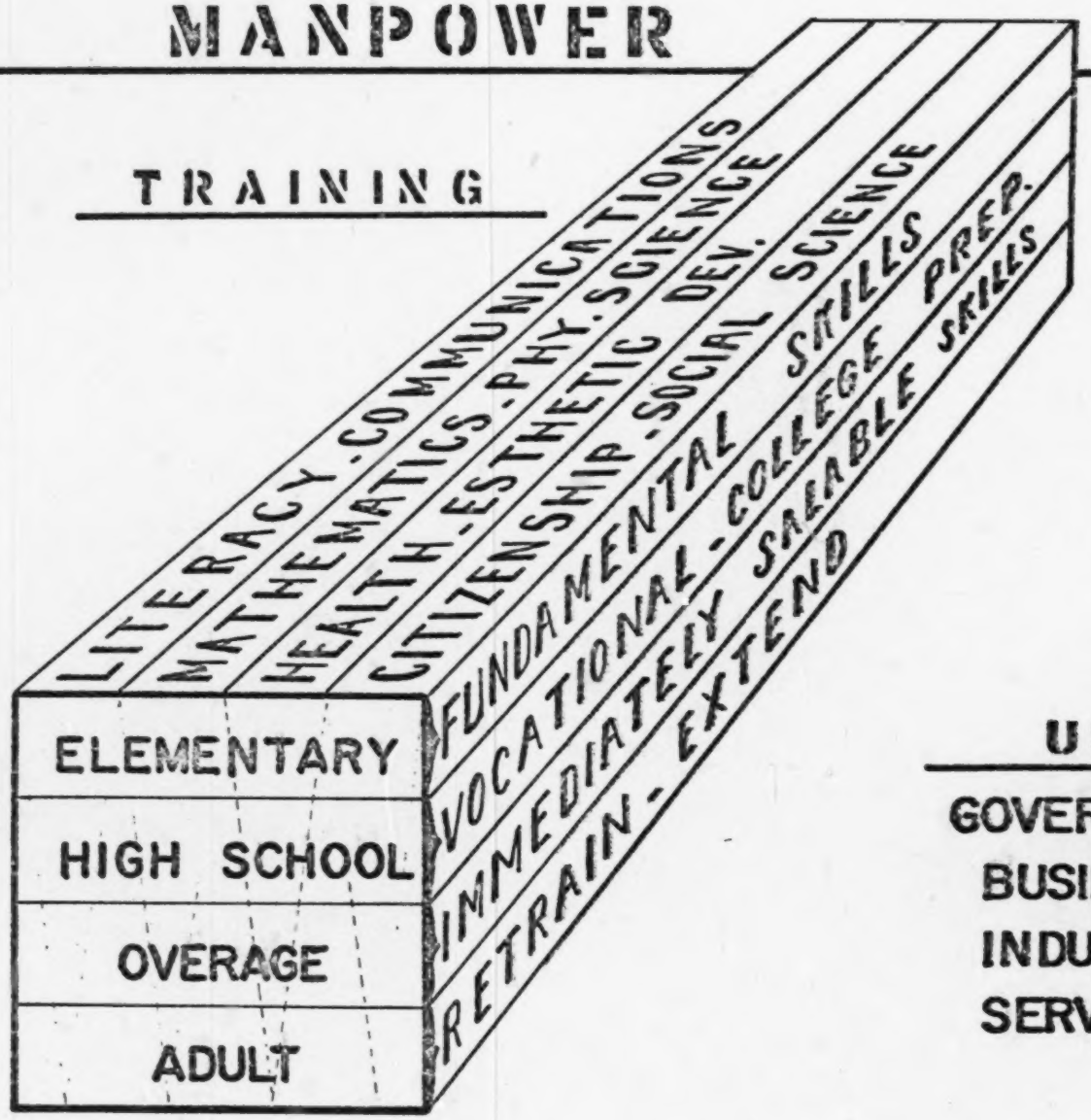
The Department of Education has made no provision for supervision of the instructional program. The physical problem of supervision is immense due to the scattering of 41 instructional sessions throughout the city on morning, afternoon, and night schedules. Telephones do not exist. Public transportation is not adequate and automobiles are not available to responsible personnel. There is no city-wide coordination of school activities. Principals have not been trained to look at and coordinate the total program of the school.

MANPOWER

NEEDS

NATIONAL GOALS
UNIFICATION
ECONOMIC
SOCIAL
INSTITUTIONAL

TRAINING



EVALUATION

INSTITUTION GROWTH
BEHAVIORAL CHANGES
ECONOMIC RETURNS
SOCIAL RETURNS
MANPOWER PRIORITY
MODIFY SCHOOL PROGRAM

USE

GOVERNMENT
BUSINESS
INDUSTRY
SERVICES

IMPROVED PROGRAM

AN IMPROVED INSTRUCTIONAL PROGRAM

The chart attempts to show graphically the establishment of educational aims based on national goals. Liberia needs a thorough manpower study of present and potential requirements for the intelligent establishment of educational priorities. The national government may well adopt education as part of its national policy to meet manpower requirements. National goals may than be determined and translated into training programs: Elementary, High School, Special Teen-Age, and Adult. These four programs may then feed trained people into the society's areas of need. These areas must be regularly evaluated to measure growth towards meeting national goals and to establish new priorities in answer to changing goals and new manpower demands. A developing Liberia must carefully plan and spend its scarce educational dollars to meet the goals of unification, economic development, social development; and institutional needs of Liberian children and youth must be provided for in the total instructional program.

The project will emphasize for the age group 6-12 the development of skills in communication, citizenship, mathematics and science. Materials will be produced to assist teachers with limited training to carry on a program at the appropriate level and with the necessary learning sequences.

The high school program, while continuing to develop students for college work, will place heavy emphasis on programs for the 1,900 overage youth (boys and girls between the ages of 15 and 26 now in elementary programs). Long range planning for the expansion of the academic program will be instituted.

Short-term training programs to provide part of the overage students with immediately saleable skills will receive high priority. A large percentage of this group can be held in a formal school program for a short time only. Programs for all youth, particularly the overage youth, will include trips with the specific purposes of helping these young people to know their country and its potentials, and to encourage the integration of tribal groups. Closer cooperation with the Liberian National Youth Movement will be encouraged in the areas of country travel and camping as well as agriculture.

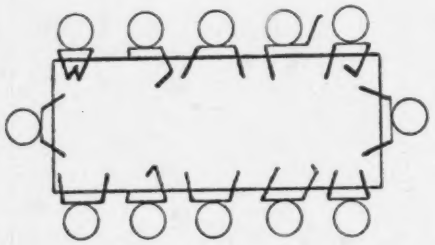
The high school will develop elementary and advanced programs in the vocational areas of woodwork, metal work, auto mechanics, electricity, and fundamental tool skills; a business program will teach typing, shorthand, business machines, and general office procedures. The areas of emphasis in the vocational fields will be the construction industry, business and light industry, and agriculture.

The French language program will be strengthened from the junior high school through the senior high school in order to produce the skills required by government and business.

The vital need to evaluate the training output as it attempts to meet the needs of a developing country's national goals cannot be overemphasized. A built-in evaluation is the only economical method for program priority and manpower input.

MONROVIA CONSOLIDATED SCHOOL PROJECT

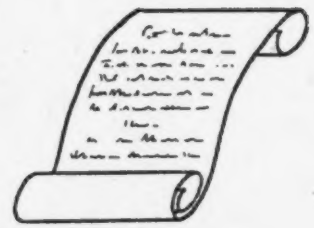
ADMINISTRATIVE SYSTEM



CITY SCHOOL COUNCIL

DEPARTMENT OF EDUCATION

CITY SCHOOL ADMINISTRATOR



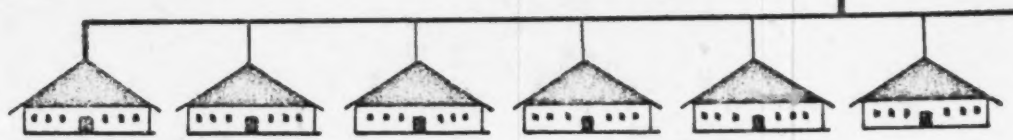
CHARTER

BUSINESS SERVICES

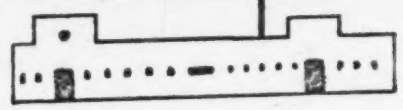
STAFF PERSONNEL SERVICES

INSTRUCTIONAL SERVICES

PUPIL PERSONNEL SERVICES



ELEMENTARY SCHOOLS



HIGH SCHOOL

ADMINSTRATIVE SYSTEM

The creation of a new administrative system consolidating the Monrovia schools present two quite different problems, represented on the upper and lower halves of the accompanying chart.

The first problem is that of creating an institution which does not now exist in Liberia: a city school system. This will be, in the language of the loan agreement for the new high school, a new "legal entity" to administer the government schools of the urban area. Within the city it will replace the present procedures by which the Department of Education attempts to administer directly and individually some seven hundred schools throughout Liberia. The problem is to establish relationships among four components: the Department of Education, a city school council, a charter for the school system, and a city school administrator. Of these four, only the Department of Education now exists. The others must, each in turn, be brought into being by competent authority.

A formal recommendation is now before the President for the appointment of an interim advisory council to confer with the Monrovia School Team in the development of the new school system, as specified in the present Project Agreement. A forerunner of the Monrovia School Council, its most important function will be to advise on the provisions of the charter. Drafting the charter is a contract responsibility of San Francisco State College. But since a Liberian institution is being formed, this work can be effective only with the close involvement of responsible, civic minded Liberians.

The charter will specify the composition, responsibilities, and limitations of the city school council, and lines of authority and financial support for the Consolidated School System. Following its enactment, a city school administrator can be appointed, who can proceed to organize and manage the school system, administering the schools and providing them the services required in a modern urban complex.

The second problem, that of administering and providing services, does not involve a new entity. It is a matter of developing and improving present services by taking know-how already common in many countries and adapting it to Liberian needs. Business services include budgeting, accounting, payroll, warehousing and distribution, and buildings and maintenance. Staff personnel services, for professional and service personnel, include record systems, recruitment, development of merit systems and salary schedules, coordination of recommendations on employment, promotion, and placement, and coordination of in-service education programs.

ADMINISTRATIVE SYSTEM (Contd.)

Instructional services include curriculum development, classroom supervision, and development and selection of instructional materials. Pupil personnel services include pupil accounting, testing, pupil placement, vocational guidance, health and nutrition, and liaison with community children's welfare agencies.

During the first year of the project, beginnings have been made in curriculum development and supervision in close connection with teachers workshops, and first steps have been taken in pupil accounting and testing programs. From these beginnings the way appears open for continued steady development of these two service areas. In staff personnel a beginning has been made in teacher accounting through regular monthly reports from principals and careful work in teacher placement. In business services development has been very meager through inability to get release of budgeted funds. In these two areas, current difficulties in establishing regularized procedures for teacher placement, in getting action on requisitions, and in improving the salary schedule make it clear that the problems are deeply involved in the economic and political structure of the society. Development of these two areas will depend both on firm charter provisions and on support at the highest levels of the government.

PROGRESS SUMMARY, OCTOBER, 1963

The number of pupils and out-of-school young people continues inexorably to increase. Census data and improved school reports give a more accurate count of them, but little can be done to help them without improved facilities.

During the past year, redistribution of pupils and teachers among buildings has made some improvement in the situation. Regular visits of team members to schools, the pilot teachers' workshop, and regular principals' meetings have improved reporting practices and pupil and teacher attendance. These activities have revealed a deep willingness to improve the schools, both in the school staffs and in the Department of Education. Excellent working relationships have been established.

However, the project has encountered serious difficulties in moving forward toward these goals: (1) the building program, including rehabilitation of existing buildings, (2) expenditure of operating funds, and (3) development of the new administrative system. Delays in these three areas have slowed up the project as a whole.

Funds budgeted for building rehabilitation and maintenance have not been expended, although incessant efforts have been made. School site acquisition has been slow and inconclusive, and approval of architects' plans for buildings has been subject to endless review and delays.

Less than five percent of funds budgeted for supplies, equipment, and maintenance has been released; consequently the development of business services has proceeded hardly at all.

Development of the new administrative structure has lagged through delay in appointing an advisory council for drafting a charter.

In sum, the project has moved well in relationships among people, in the training program, and in initial field operations. It has lagged badly on the side of material support and new administrative organization. Progress made has been encouraging but further progress now depends on greater understanding and support at higher levels of government, where basic policy decisions can be made in support of the project.

/bnw

MONROVIA CONSOLIDATED SCHOOL SYSTEM

STAFF ANALYSIS STUDY

(A Research Project)

By

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Personnel Administration Specialist

San Francisco State College Contract Team
Monrovia, Liberia

April 1970

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I. INTRODUCTION

A. Background and Context

Liberia, the oldest republic in Africa, has been involved in considerable change during the last twenty-five years. Only twenty-five years ago Liberia was composed of many villages that were relatively isolated from one another. The people in these villages were part of a self-sustaining, independent tribal type of life with communication limited to neighboring villages within walking distance. During that time the only large foreign concession in Liberia was the Firestone Rubber Company, which developed in Liberia one of the world's largest rubber plantations.

Just prior to the conclusion of World War II, Liberia began a massive expansion program. During this period a deep water harbor was developed near the capital city of Monrovia, roads were built into the interior, foreign businessmen were encouraged to open mercantile stores, rich mineral and lumber resources were discovered, and large industrial foreign concessions were offered opportunities to share in the expansion of this small nation.

The city of Monrovia became the hub of this expansion activity. Since the Republic began, Monrovia has been the seat of government and housed all government buildings, the Executive Mansion and the major machinery for conducting affairs of the nation. The rapid period of expansion changed the city of Monrovia from a small, rather provincial, West African town to a busy center of commerce. The new roads opening up the interior brought many tribal people from the hinter-

land to Monrovia for jobs and more suitable educational facilities. The rapid expansion of Monrovia created many problems long familiar in the cities of more industrialized countries, such as crowded housing areas and increased strain on sanitation, communication, transportation and educational facilities.

The Government of Liberia has made concerted efforts to meet the challenges associated with this rapid period of change. Through local taxation; profits derived from the concessions; loans from foreign countries, the UN and the World Bank; and foreign aid from various countries, the Government of Liberia has developed an infrastructure and the institutions that better equip the country to adjust to a rapidly changing and industrialized world.

During the latter years of the fifties, the Government of Liberia saw a need to modernize the educational system in the city of Monrovia. Monrovia, which had grown very rapidly during the previous twenty years, had many schools, but each of these schools was operating in a semi-autonomous fashion under the auspices of the Department of Education. The Department of Education was under the leadership of the Secretary of Education, who holds a post on the President's Cabinet. As the city of Monrovia grew into a more compact area and as the many schools in the city vied separately with the Department of Education for supplies and personnel, the Department of Education, in concert with other governmental agencies, decided that a more efficient system for educating the youth in Monrovia would have to be devised. Finally, a proposal was designed which would ultimately develop a consolidated school system for the city of Monrovia. This proposed school system would coordinate an educational program for children in

grades one through twelve and bring approximately twenty-five schools under the aegis of a single administrative unit with a superintendent and governing council. The proposed administrative unit would coordinate general, administrative, personnel, business, instructional and special services activities for the schools of the system. The ultimate control of the System would rest with the Secretary of Education, but the new institution was designed to more efficiently carry out the functions of education in Monrovia as designed by the Department of Education.

The proposal for a Consolidated School System for Monrovia was drafted with the assistance of the United States Agency for International Development. That agency offered to lend the money for the project and ultimately granted a contract to San Francisco State College to fulfill the objectives of the proposal. The contract was for a ten year period. The San Francisco State College Contract Team began its activities in Liberia in 1962. By the conclusion of the year 1967 the structure for the Consolidated School System was developed and Liberian school staff members assumed total responsibility for conducting the System. The San Francisco team members at that point assumed a more vital role in advisory functions and have worked diligently to reduce their function as operational personnel, gradually phasing out of the newly established system.

During this period, as the new superintendent evaluated his staff, made necessary personnel changes, opened four new buildings, and began the process of institutional stabilization, little time was available for formal long-range planning and evaluative programs. As the transition period diminishes for MCSS and the System completes its shake-down period, more base line data will be

required in order to initiate broad programs of evaluation and action in the fields of personnel and instruction.

B. Purpose

The purpose of this study was to supply some base line data about the general teaching staff of the Monrovia Consolidated School System. Since the inception of the School System, there had never been a broad study that would provide general information about the character of the 470-member teaching staff of MCSS and present a base for future comparative studies in personnel priorities.

Specifically, the study sought to obtain information about personal characteristics, education, experience, family life, outside activities, present teaching assignments, and aspirations of teachers employed by the System. The results of the study were intended for use by the leadership of the System as:

1) a broad view of the staffing of the system;
2) a general reference for better understandings about the qualifications, experience and personal characteristics of the teaching staff;
3) a document to be used in future years as a basis for comparison when evaluating the general staff;
4) a beginning point for new research regarding personnel.

The characteristics of teachers considered in this study were:

Sex

Age

Spouse's occupation

Children in family

Place of birth

Occupation of father

Residence

Length of time at present residence

Religious affiliations

Community organizations

Members of family in education

Highest grade attained

Where training was received

Highest degree held

Major area

Experience in education

Satisfaction in present school

Subjects teacher enjoys teaching most

Subject teacher enjoys teaching least

Inservice training priorities

Extra jobs teachers have

Job preferences

Future plans

C. Questionnaire

An example of the questionnaire used in this study is shown in the appendix. The questionnaire was designed to serve two purposes. First, it was constructed as an instrument for eliciting from teachers the information desired for the study;

secondly, after the information from the completed questionnaire had been used for the study, the questionnaire would become a personal data form for inclusion in the personnel records of teachers. The first draft of the questionnaire was submitted to a panel of Liberian educators employed in the System for evaluation and revision. Simultaneously, the questionnaire was submitted to two faculty members at the University of Liberia for critical analysis. The suggestions from the MCSS staff members and the faculty members at the University of Liberia were combined and synthesized into the final questionnaire form. A field test was made of the questionnaire in one of the smaller schools in the System. During the field test, teachers responded to the questions on the survey form in an interview situation with the interviewer recording all responses on the questionnaire. Upon completion of the field test, minor revisions were made to the questionnaire and guide lines were prepared to help other interviewers be consistent and more effective when interviewing teachers on the staff.

D. Survey Method of the Study

Seven research assistants were employed to conduct interviews with the teachers in the System. The criteria used for selection of the assistants were (1) that the research assistant be a Liberian citizen, (2) that the research assistant have a familiarity with the educational process and have some involvement with schools in Liberia and (3) that the research assistant have some experience in interviewing and research techniquest.

Six of the research assistants finally employed had masters degrees and the seventh had completed a bachelor of arts degree. All seven had been teachers

in Liberia and had hald supervisory positions during their tenure in the field. One had a major in social work in addition to her experience in education, while another assistant was a practitioner in the area of counseling and guidance. Three of the assistants had had experience as school principals in Liberia and were serving in educational leadership positions at the time of this study. One had served as a high school department head and the last assistant employed had been a teacher and was serving in a system-wide coordinating capacity.

An orientation seminar was then held with the research assistants and the schedule for the study, suggestions for interviewing teachers, and other special considerations were discussed.

For the purpose of this study, the System was divided into seven sectors. Each sector contained the number of schools necessary to accommodate about 75 teachers. Each research assistant was assigned a sector and it became his responsibility to interview each teacher in his sector and record the teacher's response to questions on the survey form in accordance with procedures established by the research director. The research assistants were allowed two months to complete the interviews in their sectors.

E. Data Reduction and Analysis

Nearly all of the schools in the Monrovia Consolidated School System operate at least two school sessions, while some schools have three sessions. Each school session has a separate staff and student group. When the new large elementary schools were built in the System, it was decided to use these new schools to house

children in grades four through six and use the older and smaller neighborhood schools for children in grades one through three. Two day-elementary schools and two evening elementary schools in the school system were maintained as schools housing students in grades one through six. In addition to this, there is one junior high school and one senior high school.

The complexities of this school loading pattern created some problems in designing a format for presenting data in a meaningful fashion while having sufficient numbers for some simplified statistical analysis. It was finally decided to organize that data in a numerical graph pattern with totals shown also in percent. In the final analysis, most of the data was reduced to graph form in the following format.

Type of School and Session	Designations Used on Graphs In This Study	Number of Sessions In Category	Number of Teachers Responding
ELEMENTARY			
Primary, Gr 1-3 AM	P. AM	17	92
Primary, Gr. 1-3 PM	P. PM	15	84
Intermediate Gr. 4-6 AM	I. AM	3	38
Intermediate Gr. 4-6 PM,Eve	I. PM	4	55
Schools with Gr. 1-6 AM, PM, Eve	Incl.(inclusive)	4	55
Total Elementary		43	324
SECONDARY			
Jr. High Gr. 7-8 AM	Jr. Hi AM	1	17
Jr. High Gr. 7-8 PM	Jr. Hi PM	1	19
Jr. High Gr. 7-8 Eve	Jr. Hi Eve	1	18
High School Gr. 9-12 AM	High School AM	1	42
High School Gr. 9-12 PM	High School PM	1	7
Total Secondary		5	103

Type of School and Session	Designations Used on Graphs In This Study	Number of Sessions in Category	Number of Teachers Responding
COMBINED TOTALS			
All Elementary Sessions	Elementary	43	324
All Secondary Sessions	Secondary	5	103
Totals		48	427

Five students enrolled in a basic research class at the University of Liberia were given the task of tabulating and reducing the data for analysis. The first phase of the data reduction process was to tabulate some forty questionnaire responses of teachers by school designation and session. The second phase consisted of reducing the data to broader categories by sessions and then finally to the format charted above.

F. Further Limitations

There were several basic limitations on this first attempt at a broad scope study of school staff personnel of the Monrovia Consolidated School System. The most apparent limitation was the inability to cross-check the findings in the study, since there are not adequate records about teachers to authenticate the results. The results of this initial study will have to be taken at face value and future studies in teacher personnel will modify and refine this point of departure in personnel research.

Another limitation was the type of questionnaire used for the study. Since the questionnaire was to be used as both a survey instrument and eventually as a

teacher personal data form for inclusion in personnel records, the questions in the form lacked some specificity. Therefore, in some cases the interviewers and the persons tabulating responses had to use some judgment in interpreting responses and placing them in the proper category. Every precaution was made to reduce these ambiguities. The lack of respondents in the high school evening session was another limitation to the study. It is estimated that there are 470 staff members actively involved in teaching in the Monrovia Consolidated School System. During this study 427 teachers were interviewed, comprising 94.1 percent of the total teaching staff. It was markedly apparent, however, that evening school teachers were the most difficult to locate for personal interviews and at the evening high school only seven teachers from a staff of about 35 could be reached by the research assistant.

Despite these limitations, it is believed that this study has value for at least three reasons. First, the data can be useful to persons who are concerned with what the general staff characteristics look like at the present time without regard to how they are changing or the implications for change. Any reasonable information or variables considered here is better than none at all, provided proper cautions are observed in its interpretation. Second, this survey can serve as a 1969 data base against which future studies of staff characteristics can be compared for the purpose of inferring change. Third, certain patterns and relationships in the data might suggest fruitful hypothesis for future investigation.

II. RESULTS OF THE STUDY

A total of 427 MCSS teachers were interviewed during the study. This comprises about 94.1 percent of the total teaching staff of 470 teachers. Three hundred twenty-four teachers , representing 75.9 percent of those interviewed, taught at the elementary level (grades one through six) and 103 respondents, representing 24.1 percent of the total group, were teaching in grades seven through twelve.

A. Personal Data Regarding MCSS Teaching Staff

Sex. Of the 427 teachers interviewed during this study, 253 (59.2%) were males and 174 (40.8%) were females. At the elementary school level, the males represented 55.8 percent (181) of the teachers interviewed while the females accounted for 44.2 percent (143) of the elementary staff. The males teaching at the secondary level comprised 70.0 percent (72) of the teachers while the females represented 30 percent (31) of the secondary staff.

Age. Nearly 43 percent of the Monrovia Consolidated School staff members were less than 30 years of age while 59.7 percent were less than 35 years old. It was found that secondary teachers overall were younger than those teachers at the elementary level. At the elementary level, 69.7 percent of the respondents were less than 35 years of age while 73.8 percent of the secondary teachers interviewed were less than 35 years old. Six of the respondents at the elementary level were above the age of 56 years and one teacher was 70 years old. The median age of the teachers interviewed was 31.9 years.

I. SEX OF TEACHERS

Elementary

	Male	Female	Total
P. AM	31	61	92
P. PM	50	34	84
I. AM	20	18	38
I. PM	46	9	55
INC.	34	21	55
Total	181	143	324
Percent	55.8	44.2	100

Secondary

Jr. HI AM	10	7	17
Jr. HI PM	11	8	19
Jr. HI Eve	15	3	18
HI School AM	29	13	42
HI School PM	7	0	7
Total	72	31	103
Percent	70.0	30.0	100

Combined Totals

Elementary	181	143	324
Secondary	72	31	103
Total	253	174	427
Percent	59.2	40.8	100 .0

II. AGE OF TEACHERS

Elementary

	Ages												
	-20	20-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	NR	Total
P. AM	1	20	5	26	14	11	4	2	2	0	0	7	92
P. PM	2	25	21	18	2	4	4	1	0	0	1	6	84
I. AM	0	6	9	8	7	1	1	0	1	1	0	4	38
I. PM	0	14	13	16	6	3	0	0	0	0	0	3	55
Inc.	0	7	18	12	7	5	4	0	0	1	0	1	55
Total	0	72	66	80	36	24	13	3	3	2	1	21	324
Percent	0	22.4	20.4	24.7	11.1	7.4	4.0	.9	.9	.6	.3	6.4	100

Secondary

Jr. HI AM	0	0	8	6	2	1	0						17
Jr. HI PM	0	2	2	6	3	3	2					1	19
Jr. HI Eveq	0	1	7	7	2	1	0						18
HI Sch AM	0	3	15	13	5	22	1					3	42
HI Sch PM	0	0	4	2	1	0	0						7
Total	0	6	36	34	13	7	3					4	103
Percent	0	5.8	35.0	33.0	12.6	6.8	3.0					3.8	100

Combined Totals

Elementary	3	72	66	80	36	24	13	3	3	2	1	21	324
Secondary	0	6	36	34	13	7	3	0	0	0	0	4	103
Total	3	78	102	114	49	31	16	3	3	2	1	25	427
Percent	.7	18.4	23.8	26.8	11.6	7.2	3.7	.7	.7	.4	.2	5.8	100

Martial Status. Of the teachers in the Monrovia Consolidated School System, 60.6 percent are married while 34.4 percent are single. The remaining percentage of teachers are either divorced, widowed, or did not choose to respond to the questions. (The "no response" percentage was 6.8 percent of the teachers.) At the elementary level, 49.4 percent are married, while 54.4 percent of the secondary teachers have spouses.

Spouse's Occupation. Some confusion may have existed in this area of investigation about what constitutes a profession and a government executive, since those general categories showed a higher percentage than was expteced by the writer. Nevertheless, the study indicated that the majority of the married teachers at MCSS chose spouses who were farmers (18.5%), market ladies (16.7%), professional people (16.2%), government executives (15.3%), and teachers (10.2%). Doctors, dentists, lawyers and engineers, excluding teachers, were classified as professionals, while any person working in government in a supervisory "desk-type" job was considered a government executive. The low percentage of spouses in civil service positions (see graph) and the high percentage reported to be government executives may indicate some confusion with the respondents regarding that question. Further investigation may be required of this section of the study.

III. MARTIAL STATUS OF TEACHERS

Elementary

	Married	Single	Divorced	Widowed	No Response	Total
P. AM	53	22	4	4	2	92
P. PM	34	36	3	3	7	84
I. AM	17	12	2	2	6	38
I. PM	26	24	1	1	3	55
Inc	30	18	1	1	3	55
Total	160	112	11	11	21	324
Percent	49.4	34.5	3.4	3.4	6.5	100

Secondary

Jr. Hi AM	9	7	1	0	0	17
Jr. Hi PM	12	5	1	1	0	19
Jr. Hi Eve	12	6	0	0	0	18
Hi Sch AM	19	15	1	0	7	42
Hi Sch PM	4	2	0	0	1	7
Total	56	35	3	1	8	103
Percent	54.4	34.0	2.9	1.0	7.7	100

Combined Totals

Elementary	160	112	20	11	21	324
Secondary	56	35	3	1	8	103
Total	216	147	23	12	29	427
Percent	50.6	34.4	5.4	2.8	6.8	100

IV. SPOUSE'S OCCUPATION

Elementary

	Ministry	Business	Teaching	Professions	Make Mkt.	Civil Ser.	Gov't Exec.	Elected Official	House-wife	Farmer	Unem-ployed	Total
P. AM	3	0	6	3	16	0	15	2	0	8	0	53
P. PM	0	0	2	4	8	0	9	3	1	7	0	34
I. AM	0	0	0	3	2	0	6	0	0	6	0	17
I. P.M	0	0	0	8	1	0	2	1	0	13	1	26
Inc	0	0	2	5	8	1	1	7	0	6	0	30
Total	3	0	10	23	35	1	33	13	1	40	1	160
Percent	1.9	.0	6.3	14.4	21.9	.6	20.6	8.1	.6	25.0	.6	100

Secondary

Jr. HI AM	0	1	0	5	0	1	0	0	2	0	0	9
Jr. HI PM	0	2	2	2	1	3	0	0	2	0	0	12
Jr. HI Eve	0	1	2	1	0	2	0	0	2	0	4	12
HI Sch AM	0	2	6	4	0	0	0	0	5	0	2	19
HI Sch PM	0	0	2	0	0	0	0	0	2	0	0	4
Total	0	6	12	12	1	6	0	0	13	0	6	56
Percent	.0	8.9	22.4	22.4	1.7	10.7	.0	.0	23.2	0	10.7	100

Combined Totals

Elementary	3	0	10	23	35	1	33	13	1	40	1	160
Secondary	0	6	12	12	1	6	0	0	13	0	6	56
Total	3	6	22	35	36	7	33	13	14	40	7	216
Percent	1.4	2.8	10.2	16.2	16.7	3.2	15.3	6.0	6.5	18.5	3.2	100

Children in Family. The study indicated that 242 of the 427 teachers interviewed were married. As is customary in Liberia, in addition to children born to the parents, almost every family sponsors other children who live with them. These children, who for the purpose of this study will be designated as "wards," are generally from "up country" communities and generally have tribal or distant family ties with their sponsors. The average family size for MCSS teachers consisted of 3.3 children, including wards, and 1.7 children excluding the wards. It was also found that 37.8 percent of the children born to MCSS teachers attend government-operated public schools, while 63.2 percent of the children born to MCSS teachers attend private or mission schools. Of the wards sponsored by MCSS teachers, 67.8 percent attend government-operated public schools, while the remaining 32.2 percent attend private or mission schools.

V. CHILDREN IN FAMILY

Number of Teachers who are married or have been married	242
Number of children born to this group	412
Number of Wards living in household of this group	392
Average Number of Children in Family (excluding Wards)	1.7
Average Number of Children in Family (including Wards)	3.3

VI. WHERE CHILDREN OF TEACHERS ARE SENT FOR EDUCATION

Type	Own Children		Wards in Household	
	Number	Percent	Number	Percent
Private School	114	27.7	52	13.3
Mission School	142	34.5	74	18.9
Public School	156	37.8	266	67.8
Totals	412	100	392	100

Place of Birth. The nine counties and three territories of Liberia were used as a basis for determining the place of birth of teachers involved in this study. A category of foreign births was also included and 8.4 percent (N-36) of the teachers were in that category. Montserrado County, for which Monrovia is the county seat, provided the most teachers for MCSS (19%). Essentially, however, the Monrovia Consolidated School System has a fair representation of teachers from each of the counties. Nimba (.7%), Bong (.9%), and Grand Gedeh (1.4%), have less representation on the teaching staff, while Lofa, Grand Bassa, Maryland, Cape Mount, and Sinoe Counties comprise 67 percent of the teaching staff of MCSS (see graph). The three territories in Liberia yielded few teachers to the System, representing only 2.5 percent of the total teaching staff (N-11). The University of Liberia, the country's major school for higher education, and the lure of the capital city, bring many people from the distant counties who remain in Monrovia and become teachers. The study showed that 14.6 percent of MCSS teachers are from Maryland County, which is the greatest distance from Monrovia.

Occupation of Teachers' Fathers. Of the teachers who were surveyed, 26.9 percent reported that their fathers were deceased. The occupation listed most frequently for fathers of teachers was farming. Only 4.9 percent of the fathers had been teachers, while 6.6 percent were involved in business or commercial activities, and 9.4 percent were employed by the Government in some civil servant capacity. There was a higher percentage of fathers of secondary teachers who were employed by the Government (12.7%) as opposed

to the percentage in the elementary teacher group (8.4%). The wide difference between the number of respondents in these groups (Elem N=324, Secondary N=103) would tend to distort the percentage figure and reduce the significance of the percentage comparisons.

Residence of Teachers. In this section of the study the city of Monrovia was divided into geographical sections. These sections were Sinkor, Bassa Community, Down Town, Logan Town and New Kru Town. The category of "other" was established for areas outside the city and 5.9 percent of the teachers responded in that category. In the interest of space it was necessary to include Old Congo Town in the Sinkor category and consider all areas in the central section of Monrovia, excluding Bassa Community, Slipway and West Point, as Down Town sections. The study showed that 50.1 percent (N=214) of the MCSS teachers live in the Down Town section. The other area where most teachers reside was the Sinkor area where 21.3 percent (N=91) of the MCSS teachers live. Via Town (.2%), Clara Town (.7%), Bassa Community (4.2%), Slipway (.7%) and West Point (1.9%) house the smallest number of teachers. Of the teachers who teach in the System, 8.9 percent (N=38) live in Logan Town, while 5.4 percent (N=23) reside in New Kru Town.

Length of Time at Present Residence. Of the 427 teachers reporting in this study, 71.7 percent (N=306) stated that they resided at their present address for five years or less. From this group, 19.7 percent of the respondents reported that they had lived at their present address for less than a year. Nearly 7 percent had been at their present address from eleven to twenty years.

VII. PLACE OF BIRTH OF TEACHERS

Elementary

Category	Mont-serrado	Lofa	Bassa	Mary-land	Grand Gedeh	Cape Mount	Nimba	Bong	Sinoe	Mar-shall	Bomi	River cess	For-eign	NR	Total
P. AM	24	7	10	16	1	9	0	1	15	0	1	0	7	1	92
P. PM	13	15	8	5	1	13	2	0	14	2	0	1	8	2	84
I. AM	6	8	1	9	0	4	0	0	8	0	0	0	1	1	38
I. PM	8	8	1	13	0	8	1	0	13	1	0	1	1	0	55
Incl	6	7	5	10	3	10	0	1	5	1	1	0	5	1	55
Total	57	45	25	53	5	44	3	2	55	4	2	2	22	5	324
Percent	17.7	13.8	7.8	16.6	1.5	13.5	.9	.6	17.0	1.2	.6	.6	6.7	1.5	100

Secondary

Jr. HI AM	4	0	0	2	0	4	0	0	3	0	0	1	3	0	17
Jr. HI PM	5	1	1	1	1	3	0	1	2	1	1	0	2	0	19
Jr. HI Eve	2	3	3	4	0	2	0	0	3	0	0	0	1	0	18
HI Sch AM	9	9	3	1	0	7	0	1	4	0	0	0	8	0	42
HI Sch PM	0	1	3	1	0	1	0	0	1	0	0	0	0	0	7
Total	20	14	10	9	1	8	0	2	13	1	1	1	8	0	49
Percent	19.5	13.6	9.8	8.8	.9	16.4	.0	2.0	12.6	.9	.7	.9	16.4	.0	100

Combined Totals

Elementary	57	45	25	53	5	44	3	2	55	4	2	2	22	5	324
Secondary	20	14	10	9	1	17	0	2	13	1	1	1	14	0	103
Totals	77	59	35	62	6	61	3	4	68	5	3	3	36	5	427
Percent	18	13.9	8.1	14.6	1.4	14.3	.7	.9	16.1	1.1	.7	.7	8.4	1.1	100

VIII. OCCUPATION OF TEACHERS' FATHERS

Elementary

	Ministry	Business	Teaching	Profession	Farmer	Civil Ser.	Gov't Execu.	Elected Official	Deceased	N.R.	Total
P. AM	2	3	2	3	27	4	4	2	34	11	92
P. AM	3	5	3	8	21	4	3	1	28	8	84
I. AM	2	4	3	4	12	0	3	0	7	3	38
I. PM	2	3	4	5	19	1	1	0	18	2	55
Inc	0	3	7	1	18	4	3	1	15	3	55
Total	9	18	19	21	97	13	14	4	102	27	324
Percent	2.8	5.7	5.9	6.6	29.9	4.1	4.3	1.2	31.5	8.3	100

Secondary

Jr. HI AM	2	0	1	2	4	1	1	1	1	4	17
Jr. HI PM	0	1	0	1	8	2	1	0	1	5	19
Jr. HI Eve	0	6	0	1	6	2	0	0	0	3	18
HI Sch Eve	4	3	1	5	11	2	3	1	7	5	42
HI Sch PM	0	0	0	0	0	1	0	0	4	2	7
Total	6	10	2	9	29	8	5	2	13	19	103
Percent	5.8	9.7	2.0	8.7	28.2	7.8	4.9	1.9	12.6	[illegible]	100

Combined Totals

Elementary	9	18	19	21	97	13	14	4	102	27	324
Secondary	6	10	2	9	29	8	5	2	13	19	103
Total	15	28	21	30	126	21	19	6	115	46	427
Percent	3.5	6.6	4.9	7.0	29.5	4.9	4.5	1.4	26.9	10.8	100

IX. RESIDENCE OF TEACHERS

Elementary

	Sinkor	Bassa Com.	Down Town	Slip-way	West Point	Vai Town	Clara Town	Logan Town	New Kru	Other	N.R.	Total
P. AM	18	2	43	1	2	0	1	9	7	8	[illegible]	92
P. PM	21	5	41	0	3	0	1	5	2	5	1	84
I. AM	6	1	19	0	1	0	1	5	5	0	0	38
I. PM	9	1	32	0	0	1	0	7	5	0	0	55
Inc	8	5	28	2	1	0	0	8	1	2	0	55
Total	62	14	163	3	7	1	3	34	20	15	2	324
Percent	19.1	4.3	50.3	.9	2.2	.3	.9	10.6	6.2	4.6	.6	100

Secondary

Jr. HI AM	5	0	9	0	1	0	0	1	0	1	0	17
Jr. HI P.M	4	1	11	0	0	0	0	0	1	1	1	19
Jr. HI Eve	3	1	12	0	0	0	0	1	1	0	0	18
HI Scho AM	15	2	16	0	0	0	0	1	0	8	0	42
HI Sch PM	2	0	3	0	0	0	0	1	1	0	0	7
Total	29	4	51	0	1	0	0	4	3	10	1	103
Percent	28.2	3.9	49.5	.0	.9	.0	.0	3.9	3.0	[illegible]	.9	100

Combined Totals

Elementary	62	14	163	3	7	1	3	34	20	15	2	324
Secondary	29	4	51	0	1	0	0	4	3	10	1	103
Totals	91	18	214	3	8	1	3	38	23	25	3	427
Percent	21.3	4.2	50.1	.7	1.9	.2	.7	8.9	5.4	5.9	.7	100

X. LENGTH OF TIME AT PRESENT RESIDENCE

Elementary

	Years							
	Less Than 1	1 - 5	5 - 10	11 - 20	21 - 30	31 - 40	N. R.	Total
P. AM	20	49	13	7	0	1	2	92
P. PM	12	45	14	7	2	0	4	84
I. AM	10	18	2	1	0	0	7	38
I. PM	9	32	11	2	0	0	1	55
Inc	16	26	9	2	1	0	1	55
Total	67	170	49	19	3	1	15	324
Percent	20.7	52.7	15.1	5.9	.9	.3	4.6	100

Secondary

Jr. HI AM	0	7	6	2	1	0	1	17
Jr. HI PM	1	11	2	3	1	0	1	19
Jr. HI Eve	3	8	5	2	0	0	0	18
HI Sch AM	10	24	3	2	1	0	2	42
HI Sch PM	3	2	2	0	0	0	0	7
Total	17	52	18	9	3	0	4	103
Percent	16.5	50.5	17.5	8.7	2.9	0	3.9	100

Combined Totals

Elementary	67	170	49	19	3	1	15	324
Secondary	17	52	18	9	3	0	4	103
Totals	84	222	67	28	6	1	19	427
Percent	19.7	52.0	15.7	6.6	1.4	.2	4.4	100

Religious Affiliations. The Episcopal religion was cited as the major religious group for the teachers surveyed in this study. Of the respondents, 24.6 percent were members of the Episcopal Church. The Methodist Church was the next most popular religion for the teachers with 13.3 percent of the respondents belonging to that church. Following the Methodists were the Catholic Church (12.9%), the Baptist Church (12.6%), and the Pentecostal Church (7.3%). The Lutheran Church claims 3.0 percent of the teaching staff while the Seventh Day Adventist Church represents 2.8 percent of the respondents. Of the teachers interviewed, 1.2 percent belonged to the Islamic religion, and 21.1 percent chose not to respond to the question.

Community Organizations. This section of the study indicated that 51.5 percent (N=220) of the teachers surveyed do not belong to any community organization. Those teachers who are members of community organizations chose youth associations as their major affiliation with 12.9 percent belonging to one type or another of clubs serving youth. The next most cited organization (5.6%) to which teachers belong was the U.B.F. (United Brothers of Friendship) which is a secret organization for men. Of the respondents, 10.0 percent belonged to various clubs which were too numerous to compile in graph form. Therefore, the category of "other" was devised to represent them. Ten of the respondents belonged to prestigious community masonic groups such as the "Household of Ruth" and the "Eastern Star." None of the respondents indicated membership in the Rotary Club or other masonic orders.

	Lutheran	Episcopal	Methodist	Baptist	Catholic	Pentacostal	SDA	Islamic	Other	NR	Total
P. AM	1	18	16	20	7	10	3	1	2	14	92
P. PM	0	30	11	6	9	8	3	2	1	14	84
I. AM	7	3	2	5	2	0	0	1	0	18	38
I. PM	2	9	5	4	7	5	3	0	0	20	55
Incl	2	15	7	2	7	2	1	1	1	17	55
Total	12	75	41	37	32	25	10	5	4	83	324
Percent	3.7	23.2	12.7	11.4	9.9	7.7	3.1	1.5	1.2	25.6	100
Jr. HI AM	0	8	0	0	4	2	1	0	0	2	15
Jr. HI PM	1	5	4	3	5	1	0	0	0	0	19
Jr. HI Eve	0	4	4	3	6	0	0	0	0	1	18
HI Sch AM	0	12	5	10	8	2	1	0	1	3	42
HI Sch PM	0	1	3	1	0	1	0	0	0	1	7
[illegible]	1	30	16	17	23	6	2	0	1	7	103
[illegible]	1.0	29.1	15.5	16.5	22.4	5.8	1.9	0	1.0	6.8	100
Elementary	12	75	41	37	32	25	10	5	4	83	324
Secondary	1	30	16	17	23	6	2	0	1	7	103
Total	13	105	57	54	55	31	12	5	5	90	427
Percent	3.0	24.6	13.3	12.6	12.9	7.3	2.8	1.2	1.2	21.1	100

XII. COMMUNITY ORGANIZATIONS TO WHICH TEACHERS BELONG

	Odd Fellows	UBF	Sports Assn.	Hsehold of Ruth	Eastern Star	Paro Society	Legion of Mary	Youth Assn.	Church Club	None	Other	Total
P. AM	1	3	0	4	6	3	0	5	1	58	11	92
P. PM	3	4	1	3	4	8	0	13	3	37	8	84
I. AM	1	0	3	2	1	1	0	4	5	19	2	38
I. PM	1	0	1	1	1	2	2	10	3	30	4	55
Inc	4	3	1	2	1	0	0	7	1	29	7	55
Total	10	10	6	12	13	14	2	39	13	173	32	324
Percent	3.1	3.1	1.9	3.7	4.0	4.3	.6	12.0	4.0	53.4	9.9	100
Jr. HI AM	0	1	0	0	0	0	0	2	0	12	2	17
Jr. HI PM	0	1	0	0	0	0	0	2	2	10	4	19
Jr. HI Eve	0	3	0	0	0	0	0		1	10	1	18
HI Sch AM	0	6	2	3	3	0	2	8	2	11	5	42
HI Sch PM	1	1	0	0	0	0	0	1	0	4	0	7
Total	1	12	2	3	3	0	2	16	5	47	12	103
Percent	1.0	11.7	1.9	2.9	2.9	0	1.9	15.5	4.9	45.6	11.7	100
Elementary	10	10	6	12	13	14	2	39	13	173	32	324
Secondary	1	12	2	3	3	0	2	16	5	47	12	103
Total	11	22	8	15	16	14	4	55	18	220	44	427
Percent	2.6	5.2	1.9	3.5	3.7	3.4	.9	12.9	4.2	51.5	10.2	100

Members of the Immediate Family Presently Employed in Education. Of the teachers interviewed in this study, when asked if a member of their immediate family (mother, father, brother, sister, or anyone taking the place of these relatives) was presently employed in the field of education, 219 (51.3%) responded in the affirmative. The remaining 208 (48.7%) of the 247 teachers did not have a close relative involved in educational pursuits.

XIII. MEMBER OF IMMEDIATE FAMILY OF TEACHERS PRESENTLY EMPLOYED IN EDUCATIONAL PURSUITS

	Yes	No	Total
P. AM	40	52	92
P. PM	43	41	84
I. AM	18	20	38
I. PM	29	26	55
INC	32	23	55
Jr. High	27	27	54
High School	30	19	49
Total	219	208	427
Percent	51.3	48.7	100

Salary. Two hundred sixty-two (61.3%) teachers made $100 or less per month for their teaching duties. The modal salary range was $70 to $100, with 110 (23.4%) of the teachers falling within that range. Forty-four (10.3%) teachers had salaries ranging from $60 to $70 while 67 (15.7%) of the teachers were paid between $50 and $60. Fifty-one teachers (11.9%) were receiving less than $50 a month. No teacher reported making less than $30 per month. Eighty-two (19.2%) of the teachers responding were receiving a salary between

$100 and $160 a month, while 38 (8.9%) of the teachers were receiving from $160 to $200 per month. Twenty-six teachers (6.1%) were receiving salaries between $200 and $300 per month and 19 (4.5%) teachers did not wish to respond to the question. The mean salary for all the respondents was $97.60 per month. The median salary for the teachers interviewed was $93.50 per month.

B. Training and Experience of Teachers

Highest Grade Attained. Of the 427 teachers interviewed, 133 had college degrees. This figure represents about 31.2 percent of the teaching staff of MCSS. In addition, 114 (26.7%) held only high school diplomas. Seventy-five teachers (17.6%) had attended high school but did not graduate, and 4 (.9%) had never attended high school. Only 68 (21%) of the 324 elementary teachers who responded to this question held a college degree, while 95 (29.3%) had attended college without graduating. At the secondary level, 65 (63.2%) of the 103 teachers who responded held college or university degrees. Nineteen respondents (18.5%) had had some college, while 10 (9.7%) teachers had a high school diploma. Eight teachers in the secondary group had gone to high school but did not graduate. Of the 49 high school teachers (excluding junior high school teachers) responding to this question, 36 (73.5%) had college degrees, 5 had had some college, 3 had received high school diplomas and one respondent had not graduated from high school (see graphs XV and XVI).

XIV. SALARY OF TEACHERS

	Dollars										
	30 - 40	40 - 50	50 - 60	60 - 70	70 - 100	100-130	130-160	160-200	200-300	NR	Total
Elementary											
P. AM	4	25	15	10	27	1	2	3	2	3	92
P. PM	3	8	27	8	17	1	5	5	0	10	84
I. AM	0	2	3	6	10	5	6	2	2	2	38
I. PM	0	4	17	8	13	9	3	0	0	1	55
INC	1	2	4	7	20	8	13	0	0	0	55
Total	8	41	66	39	87	24	29	10	4	16	324
Percent	2.5	12.6	20.4	12.0	26.8	7.4	9.0	3.1	1.2	5.0	100
Secondary											
Jr. Hi AM	0	1	0	1	3	7	0	3	2	0	17
Jr. Hi PM	0	0	0	0	0	8	1	6	3	1	19
Jr. Hi Eve	0	0	1	3	8	3	1	2	0	0	18
Hi Sch AM	0	1	0	1	1	4	0	16	17	2	42
Hi Sch PM	0	0	0	0	1	1	4	1	0	0	7
Total	0	2	1	5	13	23	6	28	22	3	103
Percent	0	1.9	1.0	4.9	12.6	22.3	5.8	27.2	21.4	2.9	100
Combined Totals											
Elementary	8	41	66	39	87	24	29	10	4	16	324
Secondary	0	2	1	5	13	23	6	28	22	3	103
Total	8	43	67	44	100	47	35	38	26	19	427
Percent	1.9	10.0	15.7	10.3	23.4	11.0	8.2	8.9	6.1	4.5	100

XV. HIGHEST GRADE ATTAINED

	Less Than H.S.	Some H.S.	High Sch Diploma	Some College	College Degree	N. R.	Total
Elementary							
P. AM	2	33	35	11	11	0	92
P. PM	2	17	14	37	13	1	84
I. AM	0	6	11	5	14	2	38
I. PM	0	6	11	27	11	0	55
INC	0	5	16	15	19	0	55
Total	4	67	87	95	68	3	324
Percent	1.2	20.7	26.9	29.3	21.0	.9	100
Secondary							
Jr. HI AM	0	1	2	5	9	0	17
Jr. HI PM	0	0	1	2	16	0	19
Jr. HI Eve	0	3	4	7	4	0	18
HI Sch AM	0	3	3	5	30	1	42
HI Sch PM	0	1	0	0	6	0	7
Total	0	8	10	19	65	1	103
Percent	0	7.8	9.7	18.5	63.2	.8	100
Combined Totals							
Elementary	4	67	87	95	68	3	324
Secondary	0	8	10	19	65	1	103
Total	4	75	97	114	133	4	427
Percent	.9	17.6	22.7	26.7	31.2	.9	100

Where Teachers Received Training. Of the 176 teachers (41.2%) who had received high school diplomas or had attended some high school, 59 (33.5%) had attended private or mission schools, while 110 (62.5%) had attended public schools. Seven of the 176 teachers who had only high school training received their secondary training in a country other than Liberia (graph XVII). Of the respondents who had higher education, 174 received their training at the University of Liberia. Fifteen (6.1%) respondents in the college group attended Cuttington College in Bong County; 40 (18.6%) received their higher education in colleges or universities in the United States and 12 (4.9%) received college instruction in countries other than Liberia or the United States.

Highest Degress Held. One hundred thirty-three of the teachers interviewed received a college or university degree. This comprises 31.2 percent of the 427 teachers who participated in the study. Of the degree holding group, 35 (26.3%) of the teachers held masters degrees and the remaining 98 (73.7%) of the group held a bachelor of arts or bachelor of science degree.

Areas of Study for College Group. The 247 respondents who had attended college or graduated from a college had a wide variety of majors. Seventy-five (17.5%) had chosen education as their area of study. The next most frequently stated major was social science, which was chosen as an area of study by 45 (11.4%) of the respondents who had had a college experience. English, science, and business were the majors listed next in rank order with 21 (4.8%) college trained teachers in each category. Math, forestry, language arts, and history were the least popular majors of the college group respondents.

XVI. TEACHERS WITH HIGH SCHOOL DIPLOMAS OR LESS

Level	Teachers With Less Than H.S.	Teachers With Some H. S.	Teachers With H. S. Diplomas	Total
Elementary	4	67	87	158
Secondary	0	8	10	18
Total	4	75	97	176
Percent of Teachers Reporting	.9	17.6	22.7	41.2

XVII. WHERE TEACHERS WITH HIGH SCHOOL DIPLOMAS OR LESS RECEIVED TRAINING

	Private or Mission	Public School	Outside Liberia	Total
P. AM	17	49	3	69
P. PM	17	15	2	34
I. AM	3	14	0	17
I. PM	9	8	0	17
Inc.	5	14	2	21
Jr. Hi	5	6	0	11
Hi Sch	3	4	0	7
Total	59	110	7	176
Percent	33.5	62.5	4.0	100

XVIII. WHERE TEACHERS WITH COLLEGE DEGREES OR SOME COLLEGE EXPERIENCE RECEIVED TRAINING

	University Of Liberia	Cuttington College	A. U. S. College	Other Country	Total
P. AM	18	0	3	1	22
P.P M	46	0	3	1	50
I. AM	14	2	3	0	19
I. PM	32	2	3	1	38
INC	27	1	4	2	34
Jr. High	27	6	9	1	43
High School	10	4	21	6	41
Total	174	15	46	12	247
Percent of College Group	70.4	6.1	18.6	4.9	100
Percent of Total Respondents	40.7	3.5	10.8	2.8	57.8

XK. HIGHEST DEGREES HELD

	AB Degree	MA Degree	Total
Elementary	57	11	68
Secondary	41	24	65
Total	98	35	133
Percent of Degree Group	73.7	26.3	100
Percent of Total Respondents	23.0	8.2	31.2

XX. MAJOR FIELDS OF THOSE WHO GRADUATED OR ATTENDED COLLEGE

	Education	Business	History	Lang. Arts	Agr. or Forestry	French	Science	Math	Eng.	Soc. Sci.	Other	Total
P. AM	12	0	1	1	0	0	0	0	2	4	2	22
P. PM	12	7	2	0	3	0	5	4	5	12	0	50
I. AM	10	1	0	0	2	0	1	0	2	3	0	19
I. PM	8	1	3	2	7	0	3	0	7	7	0	38
INC	14	0	0	0	1	0	1	2	3	8	5	34
Jr. High	9	5	0	2	2	1	5	5	2	10	2	43
Secondary	10	7	3	5	0	0	6	3	0	1	6	41
Total	75	21	9	10	15	1	21	14	21	45	15	247
Percent of College Group	17.5	4.8	2.1	2.2	3.4	.2	4.8	3.2	4.8	11.4	3.4	57.8

Years of Experience in Teaching. Of the 427 MCSS teachers interviewed, 274 have taught for less than 10 years. This group comprised 63.6 percent of the total teaching staff. At the elementary school level, 4.2 percent of the 324 teachers interviewed had taught for more than 20 years, while 107 (33%) of this same group had been employed as teachers for 10 to 20 years. The remaining 196 (60.1%) respondents from the elementary teacher group had been teaching from 1 to 10 years. At the secondary level, it was found that 75 of the 103 teachers were in their first 10 years of teaching. This represents about 72.8 percent of the total secondary group. The median number of years taught by the teachers interviewed was 7.1.

XXI. YEARS OF EXPERIENCE IN TEACHING

	Years													
	-1	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-57	28-30	Longer	N.R.	Total
Elementary														
P. AM	1	13	15	11	9	16	12	6	3	4	1	0	1	92
P. PM	2	20	20	12	6	8	6	3	3	0	2	1	1	84
I. AM	0	9	5	9	3	3	5	1	0	0	0	2	1	38
I. PM	0	11	20	9	4	5	3	2	1	0	0	0	0	55
INC	0	14	13	12	5	2	4	4	0	0	1	0	0	55
Total	3	67	73	53	27	34	30	16	7	4	4	3	3	324
Percentage	.9	20.8	22.4	16.5	8.3	10.5	9.3	4.9	2.2	1.2	1.2	.9	.9	100
Secondary														
Jr. HI AM	0	4	8	4	1	0	0	0	0	0	0	0	0	17
Jr. HI PM	1	3	3	2	4	1	3	1	0	0	1	0	0	19
Jr. HI Eve	0	2	8	2	2	1	0	3	0	0	0	0	0	18
HI Sch AM	1	5	13	13	4	4	1	1	0	0	0	0	0	42
HI Sch PM	0	4	2	0	0	1	0	0	0	0	0	0	0	7
Total	2	18	34	21	11	7	4	5	0	0	1	0	0	103
Percent	1.9	17.5	33.0	20.4	10.6	6.8	3.9	4.9	.0	.0	1.0	0	0	100
Combined Totals														
Elementary	3	67	73	53	27	34	30	16	7	4	4	3	3	324
Secondary	2	18	34	21	11	7	4	5	0	0	1	0	0	103
Total	5	85	107	74	38	41	34	21	7	4	5	3	3	427
Percent	1.2	20.0	25.1	17.3	8.8	9.6	8.0	4.9	1.6	.9	1.2	.7	.7	100

C. Impressions of Teachers About Their Positions

Satisfaction in Present School. A question in the survey dealt with whether teachers were satisfied in their present school and whether there were some priorities for improvements needed most in the respondent's school. Three hundred fifty-four (83%) of the respondents indicated that they were satisfied and 66 (15.5%) indicated that they were dissatisfied at their present school. Seven teachers (1.5%) chose not to respond to the question. At the high school level, 26 teachers (53%) responding indicated satisfaction with their present school, while 22 (47%) were dissatisfied.

When asked which improvement in their situation was highest in priority, 132 (31%) of the 427 respondents desired better school buildings (see graph XXIII). Sixty-six of the total group of teachers (15.5%) indicated that more textbooks was the main priority for needed improvement. Of the 324 elementary teachers responding, 128 (40%) put better buildings as their highest priority, while at the secondary level better buildings was listed as a priority by only four respondents. The junior and senior high schools are new buildings, while many of the primary schools are very old. This accounts for the wide differences in this priority between the elementary and secondary teachers. The third most important priority listed by the total teaching staff was the need for inservice education programs, with 10.3 percent of the teachers suggesting more activity in this area. The elementary teacher group placed a low priority on the need for "more conscientious students" (2.7%). At the secondary level, 15 (14.6%) of the 103

teachers interviewed placed "more conscientious students" as their highest priority for improvement. Secondary teachers (24.3%) had a tendency to place a higher priority on the need for inservice education programs than did the elementary teachers (5.8%) and were more cognizant of the need for more supportive instructional materials such as teachers' manuals (13.6%) than were the elementary teachers (3.4%). Secondary teachers placed low priority on library facilities since both of the secondary schools have libraries. There are no libraries in any of the elementary schools, but only 4 percent of the elementary respondents considered a library as a major priority, ranking it equally with the needs for a cafeteria and better building maintenance.

XXII. SATISFACTION OF TEACHERS IN PRESENT SCHOOL

	Satisfied	Dissatisfied	No Response	Total
P. AM	80	11	1	92
P. PM	71	12	1	84
I. AM	31	5	2	38
I. P.M.	49	6	0	55
INC	50	4	1	55
Jr. High	47	6	1	54
Sr. High	26	22	1	49
Total	354	66	7	427
Percent	83.0	15.5	1.5	100

	More Textbooks	Teachers' Manuals	Better Buildings	Conscientious Students	Library	Cafeteria	Better Maint.	Playgrnd.	Inser. Ed. Prog.	Other	NR	Total
Elementary												
P. AM	4	0	56	2	0	2	6	11	3	3	5	92
P. PM	13	1	43	2	1	0	6	3	1	2	12	84
I. AM	6	7	0	3	5	3	0	0	3	7	4	38
I. PM	14	1	8	2	6	8	1	4	3	2	6	55
Incl.	15	2	21	0	1	0	0	4	9	1	2	55
Total	52	11	128	9	13	13	13	22	19	15	29	324
Percent	16.0	3.4	40.0	2.7	4.0	4.0	4.0	6.8	5.8	4.5	3.8	100
Secondary												
Jr. HI AM	1	3	1	4	0	1	0	1	3	0	3	17
Jr. HI PM	1	1	0	6	0	0	0	0	4	0	7	19
Jr. HI Eve	0	3	1	0	0	0	0	1	2	0	11	18
HI School AM	7	7	2	4	0	0	2	0	16	0	4	42
HI School PM	5	0	0	1	0	0	0	0	0	0	1	7
Total	14	14	4	15	0	1	2	2	25	0	26	103
Percent	13.6	13.6	3.9	14.6	.0	1.0	1.9	1.9	24.3	.0	25.2	100
Combined Totals												
Elementary	52	11	128	9	13	13	13	22	19	15	29	324
Secondary	14	14	4	15	0	1	2	2	25	0	26	103
Total	66	25	132	24	13	14	15	24	44	15	55	427
Percent	15.5	5.9	31.0	5.5	3.0	3.3	3.5	5.6	10.3	3.5	12.8	100

Subjects Teachers Enjoy Teaching Most. In this section of the study the secondary teachers were excluded in the report of the findings. It was found that since most of the secondary teachers taught in a single subject, departmentalized situation they always chose their subject speciality as their favorite subject. At the elementary level, however, teachers are required to teach many subjects and, therefore, have likes and dislikes regarding subjects taught. Three hundred twenty-four elementary teachers (grades 1-6) were asked which subject they enjoyed teaching most. The rank order of the first five most popular subjects were:

Language Arts	30.8%
Arithmetic	30.2%
Social Studies	16.7%
Science	10.8%
Reading	5.9%

Writing or penmanship as an enjoyable subject to teach received no response while 6 teachers of the 324 interviewed indicated that they enjoyed teaching all subjects. Eight of the teachers chose not to respond to the question.

Subjects Teachers Enjoy Teaching Least. Again, only the responses of elementary teachers will be reported. In rank order of subject enjoyed least to be taught, the teachers responded as follows:

Arithmetic	21.6%
Science	18.2%
Social Studies	17.3%
Language Arts	9.8%
Reading	9.8%

Arithmetic, shown to be the most enjoyable subject to teach by 30% of the elementary staff, is considered by 21.6% of the teachers as being the least

desirable to teach. Of the five subject areas listed above, it appears that there is a normal inclination for teachers to be divided regarding their interest in certain subject matter areas. The ambivalence about such subjects as reading and penmanship, however, is worth noting with only about 12 percent of the teachers responding with either a strong positive or negative feeling about these subject areas. Forty-six of the teachers interviewed (14.2%) did not choose to respond to this question. Six teachers (1.9%) could not define a subject they enjoyed teaching least and six other teachers (1.9%) listed a variety of subjects which were grouped under the category of "other."

Inservice Work Necessary to Improve Teaching. The 324 teachers were asked in what subject area would inservice education be most beneficial to them. Eighty-seven (26.9%) of the respondents placed language arts as the most important area for inservice education and 59 (18.2%) teachers considered arithmetic as a first major area for an inservice training program. The area of social studies was third on the list of inservice priorities with 40 respondents (12.3%), and 38 teachers (11.7%) wished to have more training in science. According to the teachers, the lowest priorities for inservice education were reading (4.6%) and writing or penmanship (2.5%). Forty of the respondents (12.3%) chose not to reply to the question.

XXIV. SUBJECTS TEACHERS ENJOY TEACHING MOST

	Reading	Writing	Arith.	Lang Arts	Science	Soc. Stds.	Civics His.	All Subjs.	Other	N. R.	Total
P. AM	13	0	20	33	5	18	0	1	0	2	92
P. PM	3	0	25	26	9	14	1	3	1	2	84
I. AM	0	0	9	16	6	5	0	0	0	2	38
I. PM	2	0	25	11	7	7	2	1	0	0	55
INC	1	0	19	14	8	10	0	1	0	2	55
Total	19	0	98	100	35	54	3	6	1	8	324
Percent	5.9	.0	30.2	30.8	10.8	16.7	.9	1.9	.3	2.5	100

XXV. SUBJECTS TEACHERS ENJOY TEACHING LEAST

	Reading	Writing	Arith.	Lang. Arts	Science	Soc. Studs.	Civics His.	None	Other	N. R.	Total
P. AM	8	1	28	3	19	12	3	2	2	14	92
P. PM	6	3	16	15	19	10	1	3	2	9	84
I. AM	9	5	5	2	5	6	0	0	1	5	38
I. PM	5	2	10	2	9	13	2	1	0	11	55
INCL	4	0	11	10	7	15	0	0	1	7	55
Total	32	11	70	32	59	56	6	6	6	46	324
Percent	9.8	3.4	21.6	9.8	18.2	17.3	1.9	1.9	1.9	14.2	100

XXVI. INSERVICE WORK NECESSARY TO IMPROVE TEACHING

	Reading	Writing	Arith.	Lang. Arts.	Science	Soc. Studs.	Civics His.	Other	N. R.	Total
P. AM	4	2	16	32	12	11	3	0	12	92
P. PM	4	2	11	24	8	10	23	0	2	84
I. AM	3	1	7	6	3	9	0	2	7	38
I. PM	1	1	9	13	8	7	2	1	13	55
INCL	3	2	16	12	7	3	4	2	6	55
Total	15	8	59	87	38	40	32	5	40	324
Percent	4.6	2.5	18.3	26.9	11.7	12.3	9.9	1.5	12.3	100

D. Outside Employment and Future Aspirations of MCSS Teachers

Teachers With Other Regular Jobs. The 427 teachers interviewed for this study were asked if they held another regular job besides their Monrovia Consolidated School System position. A regular job was classified as one at which a person works steadily, is paid regularly and works prescribed hours. Ninety-three (21.7%) of the teachers responded positively to this inquiry, while 325 (76.1%) of the respondents indicated that they had no regular job other than the one held in MCSS.

Types of Extra Jobs Held by MCSS Teachers. Of the 93 teachers who had additional jobs, 61 (65.6%) stated that their extra work was teaching in either a mission or a private school. Ten of the numbers of the additional job group (10.8%) worked in Government offices, while 8 (8.6%) respondents drove a taxi. Fourteen (15%) of the respondents who held extra jobs either did not choose to answer the question or held a type of job that did not fall into a major category.

Types of Positions Respondents Would Most Prefer. If they had the opportunity to change occupations, 249 (58.3%) of the 427 respondents would again choose teaching as a profession. About 12 percent of those interviewed would prefer to be in business; 8.9 percent would assume clerical type jobs. Two (5%) of those remaining would select the ministry; 8 (1.99%) would became nurses; 11 (2.5%) would be housewives; 8 (1.9%) preferred being seamstresses; and 12

(2.8%) wished to be politicians. Nineteen of the interviewees (4.4%) chose a variety of other types of occupations, and 30 (7%) persons did not choose to answer the inquiry.

Future Plans of Teachers. As a final item of interest in the study, the researcher wished to acquire information about the future plans of teachers on the MCSS staff. Therefore, each teacher interviewed was asked what his realistic aspirations were. That is, what he was occupationally going to work toward and what he felt he could realistically accomplish. This question was markedly different from the question asked about types of positions respondents would most prefer, because that question was an "If I had it to do over" concept, while the "future plan" question was asking where each teacher wished to go from here.

One hundred forty-nine (34.9%) of the respondents indicated that they wished to remain in their present position in the Monrovia Consolidated School System. One hundred sixty (37.2%) of the 427 respondents stated that their future plan was to return to college or continue their studies abroad. Of the group planning to return to college, 89 (20.7%) were hoping to study abroad while the remaining 71 (16.5%) wished to continue their higher education in Liberia. Of the remaining 108 teachers interviewed, 33 (7.7%) planned to go into business, 8 (1.9%) enter politics, 5 (1.2%) work in Government, 23 (5.4%) work in various types of other occupations and 49 (11.7%) did not respond.

XXVII. TEACHERS WITH OTHER REGULAR JOBS

	Number	Percent	Total Teachers
Primary, AM	14	15.2	92
Primary, PM	12	13.0	84
Intermediate, AM	7	18.4	38
Intermediate, PM	14	25.4	55
Inclusive Schools	13	23.6	55
Jr. High School	23	42.6	54
Senior High School	10	20.4	49
Totals	93	21.7	427

* Nine teachers chose not to respond to this inquiry.

XXVIII. TYPES OF EXTRA JOBS HELD BY TEACHERS

	Teaching	Gov't Offices	Driving Taxi	Other	Total
Primary, AM	11	0	2	1	14
Primary, PM	11	0	1	0	12
Intermediate, AM	6	1	0	0	7
Intermediate, PM	9	0	3	2	14
Inclusive Schools	7	3	0	3	13
Jr. High School	15	5	0	3	23
Sr. High School	2	1	2	5	10
Total	61	10	8	14	93
Percent	65.6	10.8	8.6	15.0	100

XXIX. TYPES OF POSITIONS RESPONDENTS WOULD MOST PREFER

	Clerical	Teaching	Ministry	Nursing	Housewife	Business	Seamstress	Politics	Other	N.R.	Total
P.AM	15	47	1	2	3	8	2	2	6	6	92
P. PM	5	53	0	2	1	11	2	1	5	4	84
I. AM	2	20	0	0	1	7	1	0	3	4	38
I. PM	10	26	0	0	4	6	1	2	2	4	55
Incl.	3	37	0	1	1	5	2	1	1	4	55
Jr. High	3	39	1	1	0	6	0	1	2	1	54
High School	0	27	0	2	1	7	0	5	0	7	49
Total	38	249	2	8	11	50	8	12	19	30	427
Percent	8.9	58.3	.5	1.9	2.6	11.7	1.9	2.8	4.4	7.0	100

XXX. FUTURE PLANS OF TEACHERS

	Remain in Pr. Pos.	Go into Business	Return to College	Work in Gov't.	Politics	Go Abroad for Study	Other	NR	Total
Primary, AM	47	8	19	1	2	7	4	4	92
Primary, PM	33	11	14	2	1	12	3	8	84
I. AM	10	2	8	0	1	6	5	6	38
I. PM	12	4	14	1	1	14	3	6	55
Incl.	15	1	7	0	1	17	3	11	55
Jr. High	25	0	77	1	0	12	3	6	54
High School	7	7	2	0	2	21	2	8	49
Total	149	3[illegible]	71	5	8	89	23	49	427
Percent	34.9	7.7	16.5	1.2	1.9	20.7	5.4	11.7	100

III. SUMMARY AND CONCLUSION

A. Summary

This study was the first attempt made to analyze the MCSS teaching staff on a broad scope basis since the inception of the System eight years ago. Needless to say, this study did not attempt to evaluate in depth all aspects of the staff characteristics. The pertinency of this study may not be thoroughly realized at this point in time but, hopefully, the study may provide some basis for an evaluation of the general teaching staff. The Monrovia Consolidated School System staff has only been under the direct control of Liberia's educators for two years, following the selection by the Liberian Government of a school superintendent and the initiation of a governing council for the System. Since that time, the Superintendent with his staff has been modifying the System to more realistically have it conform to the institutional setting common to the country. During this stabilization period, the problems associated with transition have been defined and often solved by the administrative staff. Because of the dynamics of the problems associated with institutional stabilization, little time has been available for the administrative staff members to establish broad planning and evaluative programs. It has become apparent that the shake-down period for the Monrovia Consolidated School System has begun to subside and the regular routine common to school systems has become a reality.

An outgrowth of the study was to provide to the System more comprehensive personnel data about the teacher in the System so that more complete personnel records could be established for staff members. The complexity of organizing approximately one-seventh of the Nation's public school teachers under one unified school system and the ambiguities associated with less than precise record systems common in a developing nation have presented some problems in authenticating all of the data about teachers employed by the Monrovia Consolidated School System. With these limitations, it is hoped that the results of this study have provided a point of departure for evaluating the general teaching staff of MCSS and will serve as a base line for future comparative studies in school staff personnel.

B. Conclusions

Some general conclusions indicated in the results of the study are listed below:

1. There were more men teaching in the System than women. This is true at both the elementary and secondary level.
2. The teachers in the System are relatively young in age with the median age of teachers being about 31 years of age.
3. About one-half of the teachers in the System are married and approximately 90 percent of the married teachers' spouses are also employed.

4. Each married teacher has an average of three and one-half children in his family, including wards, and he is more than likely to send his own children to a mission or a private school while usually sending child wards living in his household to public schools.

5. Slightly over one-half of the teachers employed in the System are not prone to join community organizations. At least 80 percent of the teachers belong to an organized religion, with the largest number belonging to the Episcopal religion.

6. The average salary of teachers is slightly below $100 per month, while almost two-thirds of the teachers are receiving $100 or less per month.

7. About one-third of the teachers employed by MCSS have college degrees but almost 20 percent have not obtained high school diplomas. Seventy percent of the teachers with a college education received their diplomas at the University of Liberia and education was the most common major of the respondents.

8. Most of the teachers in MCSS have not taught for many years, with the median number of years of teaching experience being 7.1 years.

9. A large majority of the teaching staff are satisfied in their present schools with 83 percent of the teachers indicating satisfaction with their assignments.

10. Teachers are most concerned about better buildings in which to teach, with lesser but significant priorities being given to more textbooks and increased emphasis on inservice training.

11. Among elementary school teachers, language arts and arithmetic were considered the most popular subjects to teach, with about one-third of the staff ranking these subjects as areas enjoyable to teach. On the other hand, about one-fifth of the teachers ranked arithmetic and science as undesirable subjects to teach. In addition, teachers are somewhat ambivalent about teaching penmanship and reading with very few teachers responding to these subjects with either a positive or a negative valence.
12. A significant number of teachers indicated an interest in having inservice training in the subject areas of language arts, arithmetic, science and social studies.
13. Only one-fifth of the teachers in the System actually worked at another regular job and most of these who had another job were employed as teachers in their second job. It was also shown that almost 60 percent of the teachers would again choose teaching as a career if they had it to do again.
14. Teachers generally plan to remain in their present teaching position, but a significant number have aspirations of completing their higher education in a college in Liberia or a university or college abroad.

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Final Report

Student Health Survey of Monrovia Consolidated School System

CONDUCTED BY JUNO-ANN CLARKE (Ph.D)
FOR

Monrovia Consolidated School Project
San Francisco State College

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U.S.A.I.D./LIBERIA
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FINAL REPORT

Student Health Survey of Body Composition, Health Appraisal and Nutritional Status at the W. V. S. Tubman High School of the Monrovia Consolidated School System: A Pilot Study

Conducted by: Juno-Ann K. Clarke (Ph.D.), Assistant Professor of Nutrition and Home Economics, San Francisco State College and Consultant in Cafeteria Management and Nutrition Education to Monrovia Consolidated School System.

For:

Monrovia Consolidated School Project

San Francisco State College, U.S.A.I.D./Liberia Contract U.S.A.I.D./Afr-343

Introduction

The W. V. S. Tubman High School has been educating an enrollment of almost 1000 students since its opeining in 1968. The school is striving for the development of healthy minds and future leaders in academic and technical fields for the Republic of Liberia. Healthy minds are developed in healthy bodies. There are many aspects of health that are directly related to the student's ability to perform his learning activities efficiently. Much evidence indicates that students who are not optimally nourished, do not get adequate rest, suffer from contagious diseases or have other health problems do not perform well in their studies. The impetus for the development of school feeding programs stems from the need to help students in obtaining nutritional foods so that they might derive the maximum benefit from their academic and technical instruction. A student who is hungry finds difficulty in concentrating on his lessons; a student with mild anemia appears listless and continually tired and his attention often wanders; a student who has excessive absences from school because he is not feeling well misses

much of what his teacher is helping him to learn. An assessment of the health status of the students at W. V. S. Tubman High School was undertaken to gather data which would be useful to administrators, teachers and the school health nurse in helping to identify those youngsters which need additional health guidance and to indicate which health needs of the total student body are most important for the development of future health programs.

Review of Literature

Liberia has twenty-eight tribes, each with its own language or dialect. English, however, is the official language of the country. The "tribesmen" practice subsistence level hunting and agriculture, which is generally similar to that of other indigenous rain forest dwellers of West Africa (1). The urban residents are a mixed group of kwi, "in-between" and "tribesman" who come together for the purposes of commerce. The school population consists of all of these backgrounds with the predominant number coming from the first two classes of people (2).

There is a strong motivation for learning and families make many sacrifices to educate their children. Many schools have several sessions and the evening sessions are heavily populated with older students who work during the day and attend school in the evening with the hope of finding a higher paying job and bettering their living situation.

The principal food staples are rice, cassava, cocoyams, sweet potatoes and other fruits and vegetables. The lack of animal protein is prevalent. Fish usually serves as a substitute, but the supply is insufficient especially in the interior. A survey found that usually only two meals are eaten every day and in some rural areas only one meal is the pattern. Snacks or left over food from the previous day is not considered a meal, only that which

is freshly cooked. Babies are weaned anywhere between six and twenty-four months of age and fed mostly rice, cassava or other starch mixtures. Social customs appear to affect the consumption of nutritious foods especially eggs and fruits. Protein intake is very low and kwashiorkor among children is common. Hemoglobin levels during pregnancy are low and it is estimated that eighty per cent of the population show some signs of iron deficiency. Calcium intakes are also low (3).

The practices of a community on matters of health can be divided into three groups: those which are beneficial to health, those which have no effect and those which are positively harmful. Any health education program must take these into consideration in program planning. Factors which affect the practices of a community are traditional beliefs, availability of food stuffs, degree of education, "westernization," and place within the community and family (4).

An intensive review by Johnson (5) indicated that culture had great effects on the distribution of food among family members, feeding of certain foods to children and pregnant and lactating women and in turn the nutritional status of these groups in the population of Nigeria. In most tropical countries there is an almost unbroken pattern of general undernourishment of children, especially in the lower age groups. Growth by U. S. standards is poor, and vigor and resistance to infection is usually impaired (6). Whereas low income rural groups subsist almost entirely on foods which they can raise; low income urban groups subsist mainly on the cheapest staples available in the market. These food supplies are often lacking in the protective nutrients children need most such as protein, vitamins and minerals (7).

Ideas and attitudes towards illness vary, but often being "sick" is taken as a normal event and treatment is delayed often too late to be of value. Health facilities are limited even in the urban areas and transportation to the clinic or hospital is very difficult for many families (8). The concept of regular physical examinations is almost nonexistant and preventive health measures are infrequently practiced.

Nutritional studies from other areas in West Africa indicate that protein deficiency is the most prevalent problem. Sixty to eighty per cent of the caloric intake is in the form of carbohydrate--usually some staple such as rice, cassava, yam or plantain. Protein appears when it is available and may be animal meat, fish, lizard or insects. Minerals and vitamins appear in the diet when fruits such as pawpaw, mango, avacado and sour sop and vegetables such as cassava leaves, potato greens, platto leaves, hot peppers, tomatoes, wild spinach and bitter balls are consumed. Vitamin A is contributed mostly through the use of red palm oil and greens. Iron and calcium appear in short supply (9).

Reports from Guinea indicate the most common nutritional problems are dental caries, goiter due to iodine deficiency and growth retardation caused by low protein levels. Ivory Coast residents also have a high incidence of iodine deficiency goiter, anemia, malaria, poor growth patterns and enlarged liver and spleens. Problems in Nigeria are growth retardation of children, riboflavin and thiamin deficiency, protein-calorie malnutrition among children, anemia and various respiratory and infectious diseases and peridontal disease (10).

Studies by Monckeberg (11) have indicated correlations between animal protein intake and intelligence quotient, with those children who consume

a smaller proportion of animal protein having a significantly lower intelligence quotient. There is still confusion as to whether this retardation is permanent or transitory, but the negative effects of malnutrition on the learning performance of children has been demonstrated to exist. There seems to be strong evidence that malnutrition "per se" affects not only the expression of genetic potential in physical development, but intellectual development as well. Chronic subalimentation of school children would appear to affect their ability to learn at maximum efficiency.

An appraisal of the total health of the student would give useful directions towards programs designed to alleviate and improve these conditions which may impede improved learning.

Objectives

The objectives of this study were to gather empirical data which could be used to evaluate the nutritional and overall health status of the high school students and to project future program needs for the Republic of Liberia and the Monrovia Consolidated School System. Other objectives were to gain insight into the ability of high school students to purchase meals in a school feeding program and the ability of families to provide an adequate food supply at home; to investigate typical food habits of the high school students; to make preliminary observations regarding the nutritional adequacy of their dietary intakes; and to investigate differences in body structure and growth of the students.

It was anticipated that a good number of students would reflect health practices that could be detrimental to their educational efficiency and that these findings could be used to counsel the individual student with

regard to improving his health status. Also, it was postulated that the offering of a school feeding program would have a positive effect on the nutritional status of the students and that the adequacy of the nutritional intake influenced many of the physical characteristics of the student and improvement in nutritional intake would result in physical characteristics not related to genetic origin.

The pilot study collected initial data for a baseline of health status evaluation. Additional follow-up is needed to evaluate the affects of the initiated school feeding program on the nutritional status and overall health appraisal of students.

Methods

The population consisted of 102 ninth grade males, 36 eleventh grade males and 42 ninth grade female students. The students were obtained from various class lists supplied by the registrar. Scheduling of measurements was done to cause the least disruption of normal class activities. Appraisal stations were set up in the nursing office and the students rotated from one to the other so that the total time period away from a class was approximately fifteen minutes. There were no eleventh grade girls surveyed due to scheduling difficulties. The sample included almost half of the ninth grade enrollment and approximately one-fourth of the eleventh grade enrollment. Estimating the total enrollment at W. V. S. Tubman High School in the first semester of 1969 at 1000 students, the total sample comprised about 20 per cent of the students.

Heights, weights, anthropometric measurements and skinfold thicknesses were done by the nutritionist; hemoglobin levels and disease histories were

done by the school nurse; food intakes and other accessory information was recorded by the home economist. Standing and sitting heights were done using The Paper Scale for Measuring Children and Adults in English and Metric Units obtained from the Iowa Child Welfare Research Station, University of Iowa, Iowa City, Iowa. Shoes were removed for the standing heights. Weights were taken on a platform beam balance after the students removed their shoes and shirts or blouses. Trousers or skirts were not removed, but all pockets were emptied.

Anthropometric measurements of eight bony diameters and nine soft tissue circumferences were done (see Figure 1 for location of measurements). Per cent body fat and lean body mass were calculated from the "body envelope" method of Behnke (12) using the following formulae:

$$\text{Females: Lean body weight} = \left(\frac{\text{Sum of the diameters}}{83.5}\right)^2 \times \text{Height}^{1.0}$$

$$\text{Males: Lean body weight} = \left(\frac{\text{Sum of the diameters}}{54.6}\right)^2 \times \text{Height}^{0.7}$$

$$\text{Per Cent Fat} = \frac{\text{Weight} - \text{Lean body weight}}{\text{Weight}} \times 100$$

All anthropometric measurements were done on the right side of the body using a flexible centimeter tape. Bony diameters were measured using a calibrated large body anthropometer. (See Appendix.)

Skinfold thicknesses were done on the triceps area midway between the olecron and acromial processes using the Lange Skinfold Caliper, Cambridge Scientific Industries, Inc., Cambridge, Maryland.

Health appraisals were done with the use of a questionnaire and an accompanying interview by the school nurse (see Appendix). Each student was asked to respond indicating whether he had had various childhood

contagious diseases. Current disease was taken generally to mean within recent months or at the present time. The students were asked to remember to the best of their ability concerning the various diseases. If the student was unclear as to the nature of the disease, the school nurse explained the symptoms. The various tests and immunizations were also described to the students and one cause for concern was that if a Mantaux (Tuberculin) test had been done no notation was made as to whether the results were positive or negative. Visual observation was made of the oral cavity for decayed, missing and/or filled teeth. Visual inspection was also made of the ears and eyes for observable defects. No vision or auditory screenings were done.

Hemoblobin was measured using the Tallquist Paper Measuring Device since it required no laboratory facilities. A drop of blood from the index finger is pressed onto chemically treated paper and the color response is indicative of the level of hemoglobin.

Dietary intake and food preferences were obtained through both questionnaire and interview responses (see Appendix). Intakes were coded and analyzed for kcalories, protein, fat, carbohydrate, calcium, iron, vitamin A value, thiamine, riboflavin, niacin and ascorbic acid using the IBM 6400 computer and a program developed in cooperation with the Department of Nutritional Sciences, University of California, Berkeley, California. Intakes were compared with limited data available for American Negroes, Caucasian Americans (13, 14), Nigerians (15), citizens of the Ivory Coast (10), and various dietary recommendations established by the Food and Agriculture Organization of the United Nations and the World Health Organization for developing countries (16-18) and standards for sufficient intakes developed by the Interdepartmental Committee for Nutrition and National Defence (19).

The sample represented various tribal origins and no attempt was made to separate the various data components according to this parameter. (All data has been coded with this information, however, and if necessary the results could be subdivided for comparison purposes.) Copies of all data were filed with the school nurse as a part of the permanent health records of these students.

Results and Discussion

The results are divided into three separate portions. The first is an analysis of the body composition data, secondly the health appraisal, and thirdly the nutritional status and food consumption patterns. All of these have a relationship to the total health status of the student and possible intercorrelations are mentioned.

Data in Table 1 comparing mean values for standing heights, sitting heights and weights indicate that Liberian students were shorter than the Caucasian adolescents but similar to Japanese-American teenagers in standing heights. Liberian students were considerably shorter than Caucasians but only slightly shorter than Japanese-Americans in sitting heights. The comparison of these two measurements is useful to determine growth retardation due to environmental factors. Studies with Japanese have indicated that the trunk length (sitting height) is relatively unaffected by nutrient deprivation, such as lack of protein. Growth retardation generally occurs in the long bones of the lower limbs and therefore results in shorter standing heights. Increase in stature with improved nutritional environment is due largely to the increase in femur length (20). The data would appear to indicate that the stature of these Liberian students is short due to a

probable lack of animal protein during the growth period. Improvement in the protein intake of young children might result in increased stature for future generations.

When weights were compared between these same groups (Table 1), the Liberian male students were considerably lighter than both Caucasians and Japanese-Americans (21). The Liberian female students were similar to the Japanese-American females but again considerably lighter than Caucasians of similar ages. Weight and height have some relationship to each other and these results are to be expected.

When heights and weights were compared (Table 2), Liberian students were very similar in both parameters to data reported for Nigerian civilians (15).

A comparison of heights and weights shown in Tables 3, 4 and 5 indicates that Liberian students were shorter than data for American Negroes of similar ages. Total body weights for Liberian students were also considerably less than means reported for American Negroes (14, 22).

When ninth and eleventh grade Liberian boys were compared (Table 4), the eleventh graders were significantly larger in shoulder (biacromial) [$P < 0.10$] and lower hip (bitrochanteric) [$P < 0.05$] diameters, shoulder circumference [$P < 0.05$] and chest circumference [$P < 0.10$], and in kilograms of lean body weight [$P < 0.10$] but not in height. This may suggest that increase in height had been terminated due to closing of the femur epiphyses, but that breadth of the skeleton and musculature in the upper part of the body were still continuing to increase as the student matured.

Comparison of various anthropometric measurements (Tables 4 and 5) indicate that Liberian female students had slightly smaller bony diameters

for all areas than did American Negro females. Liberian male students were slightly smaller in all areas except the lower trunk (biiliac and bitrochanteric) than American Negroes. Circumference measurements were again slightly smaller for Liberian male students in all but the buttocks area and similar or smaller in all areas measured for the Liberian females when compared with American Negro students (Tables 4 and 5).

Data for per cent body fat were compared (Tables 3, 4 and 5) and Liberian male students appeared to be very much lower in this parameter than American Negro students, but Liberian female students were very similar to their American age counterparts.

A comparison of triceps skinfold thicknesses indicated that Liberian male students had much lower values (4.65 to 4.76 mm.) than those reported for Nigerian males (6.5 to 6.8 mm.) of similar ages (15). Data for Liberian female students indicated that they had slightly higher skinfold thicknesses of the same triceps area (14.69 mm.) than Nigerian women (12.00 mm.). Differences in this parameter between the sexes showed the same trend in both populations with males consistently lower than females. When this same measurement was compared in Table 3 between American Negro and Liberian males and females, Liberian males had values considerably below those reported for American Negro males. Liberian females were smaller in this measurement than American Negro females, but the difference was not as pronounced as with the male students.

Data in Tables 6, 7 and 8 indicated that Liberian students have a similar incidence of childhood diseases as is seen in the United States with the exception of smallpox (23). The incidence of this disease may have been as reported or may have also resulted from confusion on the part

TABLE 1

Comparison of Mean Values for Standing Heights, Sitting Heights and Weights of Males and Females

Standing Height			Sitting Height			Weight		
Japanese Americans 1957 (20) 17 yrs.	Brush Foundation 1931-42 (21) 17 yrs.	Liberian 17.5 yrs.	Japanese Americans 1957 17 yrs.	Brush Foundation 1931-42 17 yrs.	Liberian 17.5 yrs.	Japanese Americans 1957 17 yrs.	Brush Foundation 1931-42 17 yrs.	Liberian 17.5 yrs.
				Males				
166.7	176.6	165.3	90.6	91.8	81.7	63.3	66.9	55:8
				Females				
166.8	165.4	157.7	85.4	88.0	78.2	52.4	60.9	53.2

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TABLE 2

Comparison of Mean Values for Heights and Weights of Nigerian and Liberian Males and Females

Location	Males				Females			
	Number	Age[a/] (years)	Height (cm.)	Weight (kg.)	Number	Age (years)	Height (cm.)	Weight (kg.)
Nigerian (15)								
Derived Savannah	300	21	166	59.2	101	28	156	51.7
Savannah	179	17	164	57.9	7	26	155	60.3
Plateau	22	22	163	56.4	20	27	152	49.9
Urban Federal District	30	32	168	61.1	18	26	158	58.1
Rain Forest	146	30	167	58.3	163	25	157	50.9
Coastal	217	24	163	56.2	98	30	155	53.1
Liberian								
Ninth grade	102	17.6	165.3	55.8	42	17.1	157.7	52.8
Eleventh grade	36	19.1	167.1	57.3				

[a/] Mean of individuals between 15 and 44 years for Nigerians and 15 to 25 years for Liberians.

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TABLE 3

Comparison of Mean Values for Heights, Weights, Per Cent Body Fat, Skinfold Thickness and Weight/Height Ratio for American Negro and Liberian Males and Females

Measurement	American Negro (14) Females N=15	American Negro (14) Males N=4	Liberian Females N=42	Liberian 9th Grade Males N=102	Liberian 11th Grade Males N=36
Height (dm.)	16.22	17.82	15.77	16.53	16.71
Weight (kg.)	60.64	86.44	52.86	55.80	57.31
% Body Fat	20.97	23.88	21.22	3.53	2.97
Triceps Skinfold (mm.)	18.23	13.17	14.69	4.76	4.65
Weight/Height	3.73	4.85	3.35	3.37	3.43
Age (yrs.)	21.5	22.7	17.1	17.6 .	19.1

TABLE 4

Comparison of Mean Values of Circumferences, Diameters and Accessory Information for High School Males

Measurement	American Negro (22) Grade 11 N=168	American Negro (22) Grade 12 N=140	Liberian Grade 9 N=102	Sigma	Liberian Grade 11 N=36	Sigma
Diameters (cm.)						
Biacromial	39.0	40.4	38.1	2.5	38.9#	2.3
Chest	26.9	27.7	24.7	1.7	25.2	1.1
Biiliac	26.0	26.4	27.2	1.4	27.0@	1.2
Bitrochanteric	30.7	31.4	27.5	1.5	28.1@	1.7
Wrist-sums	11.3	11.5	10.4	0.3	10.5	0.4
Ankle-sums	14.2	14.4	12.4	0.4	12.5	0.5
Circumferences (cm.)						
Shoulder	107.4	110.3	100.8	5.4	103.2@	4.5
Chest	87.4	89.0	83.1	4.7	84.6#	3.6
Abdomen Upper	71.2	72.9 (see note)	69.2	3.9	69.4	3.2
Abdomen Lower			73.8	4.4	74.5	3.2
Buttocks	87.3	89.1	93.4	7.8	86.3	3.9
Biceps Flexed	30.3	31.6	28.5	3.5	29.2	2.3
Forearm	26.0	26.8	25.5	3.8	25.3	1.1
Wrist	16.4	16.7	16.1	4.0	15.8	0.7
Accessory Information						
Stature (dm.)	17.34	17.62	16.53	0.63	16.72	0.75
Lean Body Weight (kg.)	54.4	57.7	53.82	6.8	55.6	5.2
Weight (kg.)	64.0	67.6	55.8	6.8	57.3	5.2
% Body Fat	14.3	13.8	3.5		2.9*	
Age (yrs.)	16.5	17.4	17.6	1.9	19.1	1.7

Note: Figures in parentheses represent the number of subjects. Ankle and wrist diameters represent the sum of the right and left sides. Biceps, forearm and wrist circumferences represent the right side of the body. Figures for the American Negro abdomen represent the means of the upper and lower abdomen measurement.

* Significant at the 1 per cent level between ninth and eleventh grade Liberian boys.

@ Significant at the 5 per cent level between ninth and eleventh grade Liberian boys.

Significant at the 10 per cent level between ninth and eleventh grade Liberian boys.

TABLE 5

Comparison of Mean Values of Circumferences, Diameters and Accessory Information for High School Females

Measurement	American Negro (22) Grade 11 N=139	American Negro (22) Grade 12 N=117	Liberian Grade 9 N=42
Diameters (cm.)			
Biacromial	36.3	36.2	35.2
Chest	24.3	24.5	23.2
Biiliac	25.9	26.8	26.0
Bitrochanteric	30.7	31.2	29.7
Wrist-sums	9.8	10.2	9.7
Ankle-sums	12.4	12.7	11.7
Circumferences (cm.)			
Shoulder	99.1	99.8	94.6
Chest	83.6	85.0	81.2
Abdomen Upper	70.4	73.3 (see note)	66.1
Abdomen Lower			73.6
Buttocks	93.5	95.1	89.8
Biceps Flexed	27.0	27.1	27.2
Forearm	23.5	24.0	24.6
Wrist	15.5	15.5	14.9
Accessory Information			
Stature (dm.)	16.34	16.39	15.78
Lean body weight (kg.)	45.6	47.3	41.6
Weight (kg.)	58.0	59.6	52.9
% Body Fat	20.3	19.6	21.2
Age (yrs.)	16.3	17.2	17.1

Note: Figures in parentheses represent the number of subjects. Ankle and wrist diameters represent the sum of the right and left sides. Biceps, forearm and wrist circumferences represent the right side of the body. Figures for the American Negro abdomen represent the means of the upper and lower abdomen measurements.

of the students as to the difference between chickenpox and smallpox. It was interesting to note that students who said that they had had smallpox and recovered from the disease were frequently without body scars and also they indicated that they had participated in the school immunization program for this desease. No follow-ups were made on these students to ascertain whether the smallpox vacination "took" in those who had histories of the disease.

Malaria was almost universally expressed as a recurrent or current disease. Almost eightly per cent of the allergic responses reported were for the malarial drugs chloroquine and novaquine. This combined with the high incidence of malaria would seem to point to this as a primary health problem of these students. Frequent coughs and colds were prevalent and these combined with malaria appeared to be the most common causes of school absenteeism.

A frequently noted malady was "dishcloth." This was a skin eruption with a scaley, discolored and depigmented dermatitis. "Dishcloth" was not included on the original survey form, but was written in whenever a case was found. The etiology of the condition is unclear, but it appears to respond to antibiotic therapy and these students were referred to medical help.

A large number of the students participated in the immunization program for smallpox and measles held on several days at the school just prior to this study. Those who did not participate expressed that they had been absent on those particular days. No student appeared reluctant to participate in this disease preventive measure.

Dental caries were fairly prevalent, but most students had excellent

teeth considering the scarcity of dental care. Those with dental problems were referred for treatment.

During the interview the students had many questions concerning health practices and exhibited much interest in learning about their health and its maintenance. Throughout the study interest was expressed in health careers, especially by the girls. No formalized records were made of these spontaneous questions or inquiries.

Replies to the questions concerning favorite foods, disliked foods and foods typically eaten for snacks were analyzed for frequency of responses to certain common items. (See Appendix for record form.) The most popular foods were rice, cassava leaf sauce, potato green sauce, palmbutter, fish or beef gravy, collards, and fufu, listed in decreasing order. It was not surprising to see rice at the top of the list for eighty per cent of the students since it is considered the staple crop of Liberia. When asked which foods were disliked, the students replied with fufu, palmbutter, fish gravy and bitterballs in decreasing order. The replies for disliked foods were considerably less than for the liked foods and in no case did more than fifteen per cent of the students indicate a dislike for a food. Many students did not list a disliked food and indicated that they ate everything that was available whether they particularly liked it or not.

When questioned about snack foods, most students indicated that these were consumed when available. Fruit was picked from trees and consumed often and other snacks were eaten when money was available for purchasing these additions to the daily meals. The consumption of carbonated beverages as a snack food had a particularly high frequency with almost 100 per cent of the students replying that this was consumed when it could be purchased.

Cookies and candies were next in popularity with 75-80 per cent of the students at some time. The most popular fruits for snacks were oranges, bananas, mangos and pineapples. Fifty per cent of the students reported eating these fruits several times per week.

Records of typical food intake for a day were analyzed using the IBM 6400 computer. Portion size was estimated using the weights of common foodstuffs as served in the school cafeteria. These portion sizes were similar to the amounts usually consumed as observed by the author. Many of the students reported that the meal served in the cafeteria was the only one or the main one which was eaten during the day. Nutrient content of local specialties was calculated using various food composition tables (25-29) and recipes (30).

A comparison of mean values for nutrient intakes for ninth grade male and female and eleventh grade male students indicated that the ninth grade female students had the highest overall intakes for almost all nutrients as shown in Tables 9 and 10. Ninth grade males had perhaps the lowest overall nutrient intakes of the three groups but were similar in several respects to data for eleventh grade males. All intakes for all groups of students were considered either deficient or low when compared with the evaluation guides established by I.C.N.N.D. (19) and the F.A.O./W.H.O. Recommendations for nutrient intakes (16-18, 24). The ascorbic acid intakes of the female students were borderline of the acceptable level of the I.C.N.N.D. guide as shown in Table 11. (See Appendix for I.C.N.N.D. and F.A.O./W.H.O. Nutrient Intake Guides and Recommendations.)

Data in Table 9 indicated that ninth grade girls had higher intakes of thiamin, riboflavin, niacin and ascorbic acid significant at the five

per cent level when compared with the ninth grade boys. When intakes for ninth and eleventh grade male students were compared (Table 10), ninth grade boys had lower intakes of protein and thiamin [$P < 0.10$], niacin [$P < 0.05$], and protein as per cent of total kcalories [$P < 0.01$] than did the eleventh grade boys. The nutrients which appeared to be most lacking for Liberian students were kcalories, protein (especially animal protein), calcium, iron and riboflavin.

Mean values for the intake of various nutrients for Liberian students were compared with data reported for Ivory Coast residents (10) and Nigerians (15) in Table 12. In general, the Liberian students had lower intakes of all nutrients except fat than did the Ivory Coast population. Intakes of all nutrients for the Liberian students were lower than Nigerian adults with the exception of vitamin A and ascorbic acid in the Jarawaji district.

When Liberian students were compared with limited data available for American Negro students of high school and college age (Table 13), the American intakes far exceeded the level of mean nutrient consumption of the Liberian students in most instances. Levels of ascorbic acid and vitamin A intake were most similar in the comparison between the American Negro adolescents and Liberian youngsters. In general, Liberian students ingested approximately one-third to one-half the amount of the various nutrients when compared with other population groups.

A special area for investigation was the intake of iron and its relation to hemolgobin level. Hookworm infestation occurs frequently in Liberia. The combination of low intakes of iron and protein with hookworm

prevalence predisposes a high incidence of iron deficiency anemia. Comparison of mean values for hemoglobin by the Tallquist test paper method were as follows:

Hemoglobin values for Liberian students

Group	Mean % Saturation	Std. Dev.	"t" Value[a]
Ninth Grade Males	77.19	3.88	-2.6054[@]
Eleventh Grade Males	79.08	3.29	
Ninth Grade Females	75.86	4.95	

[a] Comparison of means between male groups only.

[@] Significant at the 5 per cent level.

While the values for hemoglobin saturation were not drastically low, there was some indication for concern. Values for female students were lower than males, but this difference between sexes occurs commonly during the female reproductive age span. Significantly higher saturation levels for the eleventh grade males could be a reflection of age difference and might indicate that these older students had completed their growth and therefore had fewer demands on the blood forming organs than did the younger male students. These results must be interpreted with caution as the method used has rather poor reliability.

An overview of the dietary intake data would appear to indicate that Liberian students were not receiving sufficient kcalories, protein, calcium, iron, and the B complex vitamins to sustain a marginal nutritional status.

The exact relationships of these nutrient lacks to school performance, absenteeism and overall vitality of the students were difficult to pinpoint and much additional data and testing was needed. Indications of such relationships have been reported in the literature to a fragmented degree and would seem to direct attention to the need for future definitive study of these correlations.

The assessment of dietary intakes was beset with problems. The accuracy of the recall method depends in large measure on the memory of the subject and his ability to describe specifically the type of food, its method of preparation and the amount consumed. This was particularly difficult as many of the students consumed snacks or other foods which were not considered "meals." Intensive interviewing was necessary to achieve the records. Disparities between the daily food record and the snack preferences were especially evident. The author was concerned that few of the snack items appeared on the food records calculated for nutrient content.

Information on the nutrient composition of the various foodstuffs was often unavailable. The lack of analysis data for mineral and vitamin content of indigenous foods was of paramount importance. When values could be located, these were often only for raw foodstuffs and not as they would be combined, cooked and eaten by the subjects. The combination of overly generalized daily food records, poor specificity as to amounts eaten, recipes used and methods of cookery, and incomplete food analysis data could be one reason for the low mean values calculated for the various nutrients. This in no way completely negates the evidence which was strongly suggestive of inadequacy of nutritional status for these students when their nutrient intakes were compared with the commonly used international

guides and recommendations (16-19, 24).

Conclusions and Implications for Future Study

Body composition data appeared to indicate that there was some evidence of growth retardation among the students at W. V. S. Tubman High School. Students were found to be shorter in both standing and sitting heights, lighter in weight and lower in subcutaneous fat than other groups of similar racial origins reported in the literature. Female students were not as lean as male students.

Health records indicated a high incidence of certain debilitating diseases such as malaria and frequent coughs and colds. Students appeared to have an interest in health and participated in programs available at the school for prevention of contagious disease.

Analysis of dietary records indicated that many students had sub-alimentation of several of the necessary nutrients and protein and iron were of special concern. Hemoglobin levels appeared borderline.

Interrelationships of these findings can be found in the common correlations between low protein, kcalorie and calcium intake and poor growth patterns; low intakes of vitamin A and ascorbic acid and incidence of respiratory diseases; low protein and iron intakes and anemia; and inadequate overall nutrient intake and lowered disease resistance and vitality of children.

Further study is needed to define more specifically the relationships between these various aspects of the health status of Liberian students and their academic performance. Such study should include: continuation of the collection of simplified body composition information such as

standing and sitting heights, weights and skinfold thickness; continuation of the disease history and updating of the health records to include visual and auditory screening for defects which might impede academic performance; improved dietary intake studies to include more specific records with amounts and combinations of foods reported in detail; analysis of common indigenous foods for a better picture of nutrient content; analysis of hemoglobin levels using improved techniques and equipment; and comparison of these above results with attendance and scholastic recores of the students.

Summary

A pilot study of a sample of ninth and eleventh grade male and ninth grade female students at the W. V. S. Tubman High School was done to evaluate their overall health status, body composition and the adequacy of nutrient intakes. Various body measurements were made and health histories and food records obtained by interview and questionnaires. The body measurements and the replies to the questionnaires were analyzed for differences between the three groups of students. Results were compared between student groups and also with data for similar populations reported in the literature.

In general, the Liberian students were shorter in height, lighter in weight and leaner in subcutaneous fat than similar age groups in the United States. The frequency of malaria and respiratory diseases was high. Hemoglobin levels appeared to be somewhat low. Dietary intakes of the various nutrients were judged to be very inadequate by international standards. Protein and iron intakes were of special concern. Additional study is necessary before definitive relationships between these parameters and academic performance can be stated.

TABLE 6

Health Appraisal of Ninth Grade Liberian Male Students: N=102

Disease Condition	Yes Replies Number	Yes Replies Per Cent	Percentage Done within 1969
Disease History			
Measles	34	30.5	
Smallpox	6	5.8	
Whooping Cough	22	21.5	
Mumps	10	9.7	
Chickenpox	30	29.2	
Current Disease			
Allergy	32	31.8	
Ottis Media	7	6.7	
Pneumonia	11	10.6	
Malaria	99	96.0	
Frequent Coughs	47	45.4	
Frequent Colds	73	70.0	
Yaws	0		
Ringworm	13	12.6	
Tests and Immunizations			
Tuberculin	67	65.0	68.0
Whooping Cough	0		
Smallpox	101	99.2	82.0
Yellow Fever	11	9.4	2.0
Measles	89	86.0	100.0
Other Conditions			
Teeth--25 per cent needed attention			

TABLE 7

Health Appraisal of Eleventh Grade Liberian Male Students; N=36

Disease Condition	Yes Replies Number	Yes Replies Per Cent	Percentage Done within 1969
Disease History			
Measles	9	25.0	
Small Pox	4	11.0	
Whooping Cough	4	11.0	
Mumps	5	13.0	
Chicken Pox	18	50.0	
Current Disease			
Allergy	4	11.0	
Ottis Media	6	17.0	
Pneumonia	1	3.6	
Malaria	34	96.0	
Frequent Coughs	17	47.5	
Frequent Colds	22	61.5	
Yaws	0		
Ringworm	3	8.4	
Tests and Immunizations			
Tuberculin	21	59.0	76.0
Whooping Cough	0		
Small Pox	35	97.0	83.0
Yellow Fever	6	17.0	17.0
Measles	28	78.0	100.0
Other Conditions			
Teeth--9 per cent needed attention			

TABLE 8

Health Appraisal of Ninth Grade Liberian Female Students: N=42

Disease Condition	Yes Replies Number	Yes Replies Per Cent	
Disease History			
Measles	21	49.0	
Smallpox	1	4.2	
Whooping Cough	11	25.5	
Mumps	11	25.5	
Chickenpox	16	37.0	
Current Disease			
Allergy	15	35.0	
Ottis Media	9	21.0	
Pneumonia	8	18.6	
Malaria	42	100.0	
Frequent Coughs	22	51.0	
Frequent Colds	27	63.0	
Yaws	0		
Ringworm	2	5.0	
Tests and Immunizations			Percentage Done within 1969
Tuberculin	32	75.0	56.0
Whooping Cough	0		
Smallpox	42	100.0	89.0
Yellow Fever	6	14.0	0.0
Measles	41	96.0	100.0
Other Conditions			
Teeth--30 per cent needed attention			

TABLE 9

Comparison of Nutrient Intakes of Ninth Grade Liberian Students at W. V. S. Tubman High School

Nutrient	Mean	Standard Deviation	"t" Value[a]
Ninth Grade Females (N=42)			
Calories	1052.00	383.21	-0.6858
Protein g.	31.28	11.91	-1.8081#
Fat g.	52.89	32.54	0.2282
Carbohydrate g.	109.63	37.27	-1.3139
Calcium mg.	237.07	140.55	-0.8145
Iron mg.	4.35	1.74	-0.1634
Vitamin A I.U.	2697.55	2440.41	-1.2394
Thiamin mg.	0.29	0.18	-2.4484@
Riboflavin mg.	0.38	0.18	-2.2500@
Niacin mg.	7.34	5.85	-2.4589@
Ascorbic Acid mg.	31.18	21.08	-2.1478@
Protein Per Cent of Calories	3.10	0.90	-1.1929
Ninth Grade Males (N=102)			
Calories	1002.86	394.72	
Protein g.	27.79	9.97	
Fat g.	54.22	31.65	
Carbohydrate g.	99.59	43.36	
Calcium mg.	216.10	140.68	
Iron mg.	4.28	2.28	
Vitamin A I.U.	2264.89	1644.19	
Thiamin mg.	0.23	0.14	
Riboflavin mg.	0.31	0.16	
Niacin mg.	5.38	3.60	
Ascorbic Acid mg.	23.32	19.54	
Protein Per Cent of Calories	2.91	0.88	

[a] Comparison of means of two groups.

@ Significant at the 5 per cent level.

Significant at the 10 per cent level.

TABLE 10

Comparison of Nutrient Intakes of Male Liberian Students at W. V. S. Tubman High School

Nutrient	Mean	Standard Deviation	"t" Value[a]
Ninth Grade (N=102)			
Calories	1002.86	394.72	0.5261#
Protein g.	27.79	9.97	-1.8072#
Fat g.	54.22	31.65	1.9663#
Carbohydrate g.	99.59	43.36	-1.5497
Calcium mg.	216.10	140.68	-0.0838
Iron mg.	4.28	2.28	0.4517
Vitamin A I.U.	2264.89	1644.19	-0.0498#
Thiamin mg.	0.23	0.14	-1.6744#
Riboflavin mg.	0.31	0.16	-1.5628@
Niacin mg.	5.38	3.60	-2.3380@
Ascorbic Acid mg.	23.32	19.54	-0.2700*
Protein Per Cent of Calories	2.91	0.88	-3.2160*
Eleventh Grade (N=36)			
Calories	962.44	455.14	
Protein g.	31.34	11.94	
Fat g.	41.79	39.28	
Carbohydrate g.	111.27	31.57	
Calcium mg.	218.28	137.02	
Iron mg.	4.09	2.12	
Vitamin A I.U.	2282.14	2327.78	
Thiamin mg.	0.27	0.12	
Riboflavin mg.	0.36	0.16	
Niacin mg.	7.09	4.63	
Ascorbic Acid mg.	24.31	20.06	
Protein Per Cent of Calories	3.45	0.96	

[a] Comparison of means of two groups.

* Significant at the 1 per cent level.

@ Significant at the 5 per cent level.

Significant at the 10 per cent level.

TABLE 11

Comparison of Mean Nutrient Intakes of Liberian Students with I.C.N.N.D. and F.A.O./W.H.O. Standards

Nutrient	Mean Intake	Evaluation by I.C.N.N.D. Stds.(19)	Evaluation by F.A.O./W.H.O. Stds. (16,17,18,24)
9th Grade Males			
Calories	1002	None given	Deficient
Protein g/kg body wt.	0.50	Deficient	Deficient
Calcium g/day	0.216	Deficient	Deficient
Iron mg/day	4.3	Deficient	None given
Vitamin A, I.U./day	2264	Low	Adequate to low
Thiamin mg/1000 kcal.	0.23	Low	Deficient
Riboflavin mg/day	0.31	Deficient	Deficient
Niacin mg/day	5.38	Low	Deficient
Ascorbic Acid mg/day	23	Low	None given
11th Grade Males			
Calories	962	None given	Deficient
Protein g/kg body wt.	0.54	Low	Deficient
Calcium g/day	0.218	Deficient	Deficient
Iron mg/day	4.1	Deficient	None given
Vitamin A I.U./day	2282	Low	Adequate to low
Thiamin mg/1000 kcal.	0.27	Low	Deficient
Riboflavin mg/day	0.36	Deficient	Deficient
Niacin mg/day	7.09	Low	Deficient
Ascorbic Acid mg/day	24	Low	None given
9th Grade Females			
Calories	1052	None given	Deficient
Protein g/kg body wt.	0.58	Low	Deficient
Calcium g/day	0.237	Deficient	Deficient
Iron mg/day	4.4	Deficient	None given
Vitamin A I.U./day	2698	Low	Adequate to low
Thiamin mg/1000 kcal.	0.29	Low	Deficient
Riboflavin mg/day	0.38	Deficient	Deficient
Niacin mg/day	7.34	Low	Deficient
Ascorbic Acid mg/day	31	Acceptable	None given

TABLE 12

Comparison of Nutrient Intakes of Liberian Students with Ivory Coast and Nigeria Residents

Group	Prot. Cal. %	Cal.	Prot. g.	Fat g.	CHO g.	Ca mg.	Fe mg.	Vit.A I.U.	Thia. mg.	Ribo. mg.	Niac. mg.	Asc.Acid mg.
9th Grade Liberian Males	2.91	1002	28	54	100	216	4.3	2264	0.23	0.31	5.38	23
9th Grade Liberian Females	3.10	1052	31	53	110	237	4.4	2698	0.29	0.38	7.34	31
11th Grade Liberian Males	3.45	962	31	42	111	218	4.1	2282	0.27	0.36	7.09	24
Ivory Coast (10)												
Bongouanou	12.3	2153	66	20	442	751	18.0	4655	1.7	0.9	15.4	320
Bouake' W.	7.9	22.3	43.5	24	456	394	14.1	10677	1.4	0.6	11.4	188
Bouake' S.	8.1	2218	45	20	466	397	14.4	6200	1.4	0.6	11.8	222
Bouake' Center	7.9	2164	43	17	450	376	14.4	4188	1.3	0.6	10.7	206
Bouake' E.	8.1	2432	49	21.5	513	377	15.1	4964	1.6	0.7	12.9	330
Some Selected Nigerian Data (15)												
Jarawaji Men		2980	112	37		1400	56	900	3.6	1.1	27	9
Women		2650	94	33		1100	49	1200	3.2	1.1	22	12
Bunga Men		2920	94	40		800	37	4200	2.9	1.4	24	44
Women		2120	70	28		720	26	4000	2.1	1.0	17	30
Mbanege Men		2390	62	31		640	23	11880	2.1	1.0	17	54
Women		1950	54	28		540	22	13000	1.7	0.8	17	45

TABLE 13

Comparison of Nutrient Intakes of Liberian Students with American Negro High School and College Students

Group	Cal.	Prot. g.	Fat g.	CHO g.	Ca mg.	Fe mg.	Vit.A I.U.	Thia. mg.	Ribo. mg.	Niac. mg.	Asc.Acid mg.
9th Grade Liberian Males	1002	28	54	100	216	4.3	2264	0.23	0.31	5.38	23
9th Grade Liberian Females	1052	31	53	110	237	4.4	2698	0.29	0.38	7.34	31
11th Grade Liberian Males	962	31	42	111	218	4.1	2282	0.27	0.36	7.09	24
American (13) Negro Males	2426	92	116	263	965	12.0	3945	1.18	1.92	16.4	43
American (13) Negro Females	1972	69	90	231	708	9.8	6216	0.90	1.51	13.4	61
College Women American Negro (14)	1972	78	86	228	800	10.9	8980	1.12	1.81	16.67	116
College Women American Negro (31)	-	75	-		790	11.6	10423	1.07	1.39	-	124

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Appendix

Physiological Data Sheet

Name_____ Grade_____

Student Number_____Age_____Tribal Origin_____

Father's Name_____Mother's Name_____

Height dm._____Weight kg._____

Hemoglobin level_____Hair findings_____

Triceps Skinfold_____Sitting Height dm._____

Bony Diameters:

Biacromial_____

Chest_____

Biiliac_____.

Bitrochanteric_____

Wrist R._____Wrist L._____

Ankle R._____Ankle L._____

Fleshy Circumferences:

Shoulder_____

Chest_____.

Upper Abdomen_____

Lower Abdomen_____

Buttocks_____

Bicep Flexed_____

Biceps Extended_____

Forearm_____

Wrist_____

Appendix (continued)

Health Appraisal

Date_____

School_____Session_____Grade_____

Name_____M ( ) F ( ) Year of Birth_____

Address_____Tribal Origin_____

Father's Name_____Mother's Name_____

Number of Brothers_____Number of Sisters_____

Doctor Attended_____

Disease History	Yes	No	Remarks
Measles			
Smallpox			
Whooping Cough			
Mumps			
Chickenpox			

Current Disease	Yes	No
Allergy		
Ott.s Media		
Pneumonia		
Malaria		
Frequent Cough		
Frequent Colds		
Yaws		
Ringworm		

Tests and Immunizations	Yes	No	Date
Tuberculin			
Smallpox			
Whooping Cough			
Yellow Fever			
Measles			

Other Conditions	Attention	None	Referred	Result
Teeth				
Ears				
Eyes				

Appendix (continued)

Nutrition Appraisal Sheet

Name_____Grade_____Birth Date_____

Student Number_____Number of persons residing in Household_____

Typical family income/mo._____Amount spent for food/mo._____

Father's Name_____Tribal origin_____

Mother's Name_____Tribal origin_____

Typical food intake for a day:

1st meal

2nd meal

3rd meal

How many times do you eat?_____

Snacks

Carbonated Beverage

Sweets

Peanuts

Fruits

Ice Cream

Do you smoke?_____

Favorite foods:

Disliked foods:

Do you have a job?_____Father's occupation_____Income_____

How much do you earn?_____Mother's occupation_____Income_____

Do you give any of your earnings to the family?_____

Do you eat most of your food at home with the family?_____

Number of children in family_____Boys_____Girls_____

Appendix (continued)

Suggested Guide to Interpretation of Nutrient Intake Data
I.C.N.N.D. (19)

	"Deficient"	"Low"	"Acceptable"	"High"
Protein, gm/kg body weight	<0.5	0.5-0.9	1.0-1.4	≥1.1
Calcium, gm/day	<0.3	0.30-0.39	0.4-0.7	≥0.8
Iron, mg/day	<6	6-8	9-11	≥12
Vitamin A, IU/day	<2,000	2,000-3,499	3,500-4,999	≥5,000
Thiamine, mg/1,000 calories	<0.2	0.20-0.29	0.3-0.4	≥0.5
Riboflavin, mg/day	<0.7	0.7-1.1	1.2-1.4	≥1.5
Niacin, mg/day	<5	5-9	10-14	≥15

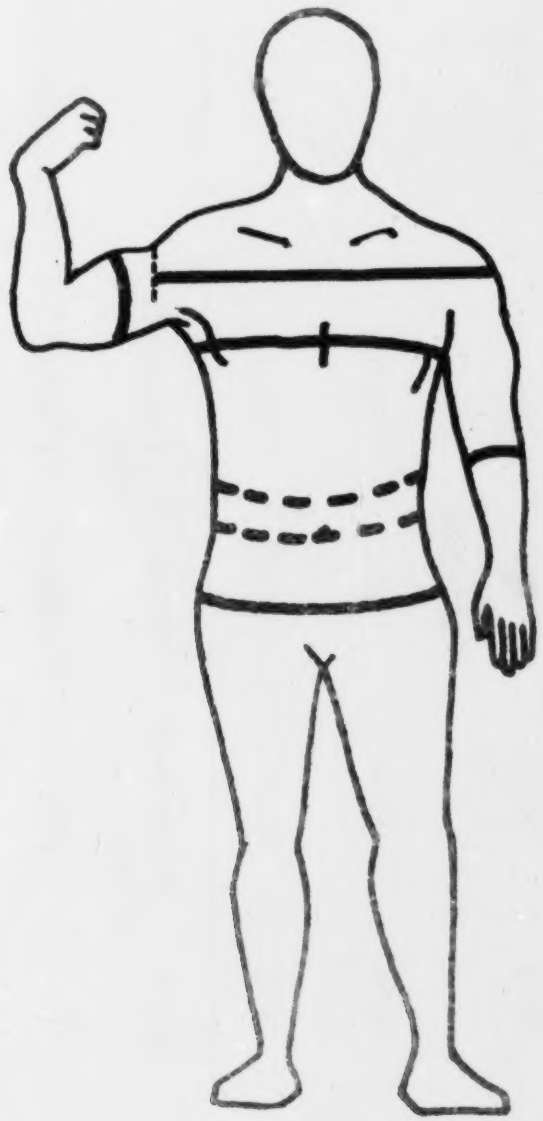
Suggested levels for 25 year old, physically active males.

Appendix (continued)

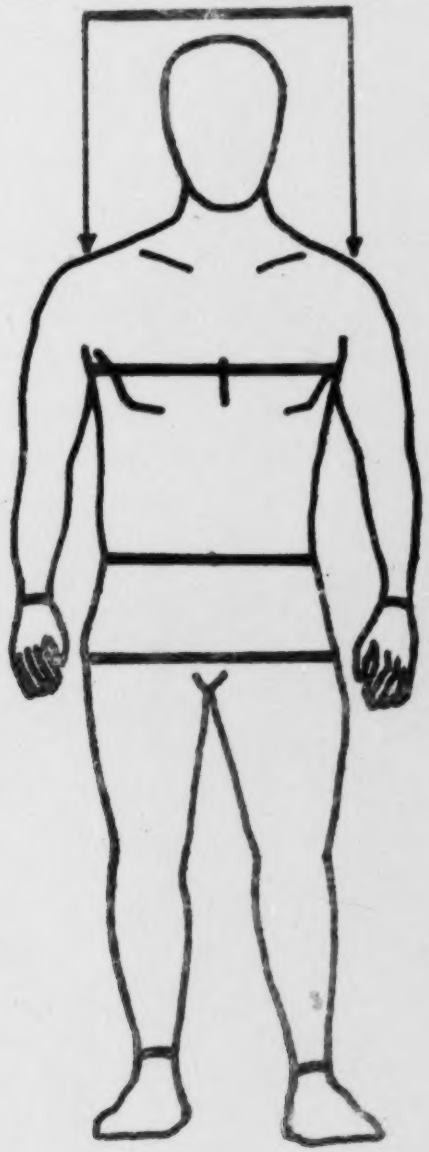
F.A.O./W.H.O. Recommendations for Nutrient Intake--A Compilation (16-18, 24)

Nutrient	Males		Females	
	Ages 16-19	20-30	Ages 16-19	20-30
Calories	3600	3200	2400	2300
Protein g/kg/day 70% N.P.U.	0.92	0.84	0.92	0.84
Calcium mg/day	400-500	400-500		
Vitamin A incl. carotene	2000	2000	2000	2000
Thiamine	1.4	1.3	1.0	0.9
Riboflavine	2.0	1.8	1.3	1.3
Niacin	23.8	21.1	15.8	15.2

LOCATION
OF CIRCUMFERENCE
MEASUREMENTS



LOCATION OF
BONE DIAMETER
MEASUREMENTS



Recommedndations to the Monrovia Consolidated School System for Future Plans and Programs as an Outgrowth of this Pilot Study.

The results of the pilot study as reported in this paper would appear to indicate the following matters for consideration by the staff and faculty of the Monrovia Consolidated School System:

1. The collection of health records should be continued in a definitive manner for all schools in the system. These records should include heights, weights, health histories and tests for defects which could impede academic performance. The collection of health records should be initiated at the elementary and junior high schools as soon as staff and facilities are available. Plans and procedures should be developed for communication between teachers and school health personnel regarding student problems and the passing on of health records as a student moves from one school to another.
2. Workshops for the improvement and support of active communication between teachers and school health personnel should be continued as a vital part of the school program.
3. School health personnel should take an active role in health education programs for the system and should be the central resource body for health information.
4. School health personnel should investigate the development of health education programs within the academic and vocational curricula to meet the interests and needs of students.
5. School feeding programs should be initiated at schools in the system which do not have such services for students and faculty.

6. A follow-up should be initiated to evaluate the effectiveness of the school feeding program at the high school and its effect on the health of the students since its opening in Spring of 1969. The students who were surveyed as ninth graders in this report could be resurveyed to denote differences in health status between the current period and the baseline data. Such differences could be a result of the feeding program.
7. An in-depth health and nutritional status study should be undertaken at all the schools in the system to coincide with the collection of health records. This study based on the experiences from this pilot report should be more definitive and the sample selected representative of the entire student body. Improved questionnaires and techniques should be used to yield more accurate and reliable data. Such data could give much useful information regarding growth rates, differences in food needs of the various student groups, which nutrients are most lacking at the various age classifications and the health needs of youngsters at the different school levels. This information would help greatly in program planning throughout the system. To date there is almost no data on nutritional status of any age group in the Republic of Liberia. The Monrovia Consolidated School System would render a great service to the country as a whole with the collection and analysis of this vital information.
8. As a result of the pilot information regarding food preferences of students, the Monrovia Consolidated School System could encourage local food manufacturers to initiate the production and packaging of

food products of high nutritional value that have appeal to young people. An example might be the introduction of a high protein and mineral containing soft drink. These products have been marketed successfully in other areas of the world and are purchased by the local population for their taste appeal. They are priced competitively with other soft drinks and carbonated beverages. The newly formed Vocational Association could be instrumental in initiating the promotion of this activity.

A CONSOLIDATED SCHOOL SYSTEM

FOR MONROVIA, LIBERIA

Report of a Survey for the

International Cooperation Administration

(PIO/T 669-65-073-3-10039)

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FOREWORD

The members of the San Francisco State College Survey Team wish to thank the Honorable William V. S. Tubman, President of the Republic of Liberia; The Honorable Nathaniel V. Massaquoi, Secretary of Public Instruction; and many other officials of the government who so graciously provided information for this survey.

They also wish to thank The Honorable Elbert G. Mathews, United States Ambassador; Mr. Michael H. B. Adler, Acting Director, United States Operations Mission to Liberia; and Mr. Harry D. Craig, Chief Education Advisor, United States Operations Mission to Liberia; and members of their respective staffs for their help and cooperation.

The Survey Team also appreciated the extensive work that had already been done by the Government of Liberia and the United States Operations Mission to Liberia on this particular project prior to their arrival. It was only because of this work and their interest in the project that the completion of this survey was possible.

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I. PURPOSE AND SCOPE OF THE SURVEY

San Francisco State College was requested to send a four-man survey team to the Republic of Liberia to determine the feasibility of consolidating the scattered school districts of Monrovia at both the elementary and secondary levels into a single system.

This survey was requested on the basis of a Project Agreement between the International Cooperation Administration and the Department of Public Instruction, Republic of Liberia, signed February 23, 1961 and most recently revised on June 8, 1961. The objectives of this agreement include the following:

1. The organization of the elementary and secondary schools of the Monrovia Area into a consolidated, modern, integrated system under a single administration.
2. The construction of new elementary schools or the rehabilitation of existing facilities to the extent necessary to assure standard schools for all children through the 6th year.
3. The construction and equipping of a junior and senior high school with a total capacity of 1500 students.
4. The employment of a school superintendent, administrators, teachers and necessary consultants for the new Monrovia system and the provision of operational services, supplies and equipment.

5. The inauguration of a comprehensive training program leading to the staffing of the entire system with fully qualified Liberian teachers and administrators.

6. The utilization of the present facilities of the University of Liberia as part of the Monrovia School System when the University is relocated.

Members of the survey team were asked to visit the Monrovia schools and to make recommendations for the improvement of administration, school facilities, budgetary support program and curriculum, and the upgrading of teacher competence and performance. Insofar as possible the team was also asked to visit schools in the outlying areas. The survey was done in cooperation with the Liberian Department of Public Instruction and the United States Operations Mission/Liberia and was limited to a 30-day visit from June 18, 1961 to July 17, 1961.

Sources of Information

Prior to the visit to Liberia, the team studied a number of references relating to the background and development of the country.

During the 30-day stay in Liberia, the basic data for this report were obtained from the following sources:

1. Reports and Documents provided by the Government of Liberia, United States Operations Mission/Liberia, and ICA/Washington included the following:

Liberian education laws.

Official reports of the Liberian Government on education, economic development, government reorganization and budget.

In addition, extensive information was obtained from the

Department of Public Instruction, Republic of Liberia, regarding number and location of schools, number of teachers employed, approved curricula, and other information on the development and status of the educational programs.

Reports from United States Operations Mission/Liberia concerning its activities in the areas of education, public health, government reorganization, agriculture, economic development, and public information.

Public statements of Liberian government officials, including addresses by the President of the Republic of Liberia and the Secretary of Public Instruction.

2. Interviews and Meetings with Liberian and United States personnel included the following:

President of the Republic of Liberia.

Secretary of Public Instruction.

Deputy Secretaries of Public Instruction and staff members of the Department of Public Instruction.

Principals, teachers, and supervisors of the Liberian public schools, and of several private and mission schools.

President and selected faculty of the University of Liberia.

Joint Commission on Economic Development, Republic of Liberia.

Director of Public Information, Republic of Liberia.

Director of Public Health, Republic of Liberia.

Deputy Director of Public Works, Republic of Liberia.

Ambassador of the United States.

Acting Director of United States Operations Mission/Liberia and members of the mission senior staff.

Chief Education Adviser of United States Operations Mission/ Liberia, and all members of the Division of Education staff.

United States Operations Mission/Liberia staff members in public administration, public health, agriculture, economic development, rural development, public works, public information and audio visual education.

International Volunteer Service Chief of Party and IVS teachers in rural schools.

3. Visits and Observations. The following educational facilities were included in the visitation and observation schedule:

Public, private and mission elementary and secondary schools in Monrovia, Cape Palmas and the ZorZor District.

The University of Liberia, Cuttington College, the Booker T. Washington Institute, and the Rural Teacher Training Institute at ZorZor.

A number of native villages and their schools, the Firestone Plantations in Harbel, and long established mission schools with programs in health and education in the Liberian hinterland.

In addition, conferences were held with the International Cooperation Administration/Washington both before and after the survey visit.

The first parts of this report deal with the background of the educational problem in Liberia and the organization of the educational system of the Republic. This is followed by a statement of the significant problems related to the development of a consolidated school systemfor the City of Monrovia and a recommended plan of technical

assistance which might be carried on by an American college or university for initiating such a system and for improving the quality of education. In presenting the material which follows every attempt has been made to be accurate. Because of the short time available, all aspects of the many educational problems studied could not be fully explored and some information may have escaped attention. The recommendations made represent the best combined judgments of the team based on the data presented in the report.

II. THE SOCIO-CULTURAL SETTING

The City and Its Schools

In urban development, a technological-industrial society centers its many activities, and population aggregates migrate to the city to participate in the activities and share in the benefits of the new life way. Here it is particularly important to provide adequate schooling opportunities, to forestall the social deterioration that occurs when people's aspirations are obstructed by their lack of the competencies needed for participation. The city of Monrovia is confronted with the problem of providing adequate schooling for a rapidly increasing urban population. It is a community which but a short time ago was a slower-paced town focused upon government and trading interests; on the periphery of it and intermingled with it were tribal fishing and agricultural activities.

Here is a town becoming a city, where communities of Kru and Fanti fishermen daily send their dugout canoes and single-sailed boats from the beaches of the city, out past the modern ocean freighters waiting to unload their cargoes and receive the iron ore, rubber and agricultural exports of Liberia. Here is the town becoming a city, where Bassa, Loma, Mandingo, Vai and Kpelle communities of thatched mud huts and houses of woven palm fronds snuggle next to modern mass structures of stone and steel which rise to house the government, trade and industry of the new urban dynamic. The tribal hut and the modern suburban dwelling stand side by side.

Today the tribal communities of Monrovia, no less than the community as a whole, are besieged with influx populations seeking to participate, and contributing to the processes or urbanization. The diversity of population and of activity now upon the city have thrust it into a new pattern and intensity of interactive relationships.

All of the agencies of the community are caught up in these new patterns of interaction and are compelled to seek appropriate modes or organization and action to meet the new demands. Extensive adjustments processes are pressed upon them.

According to a population study in 1956, of the total Monrovia population of 41,391, only 12,340 individuals had attended any school. Of these 4,968 had no schooling beyond the fifth grade. Approximately twice as many men as women had any schooling. In the same population only twenty-eight thousand of the forty-one thousand spoke English, the official language of Liberia, and only eleven thousand could write the language. Estimates of the 1961 Monrovia population are from 60,000 to 80,000, of whom only half the school-age children are thought to be in school.

Schools in the city, which have developed over the years as a collection of separate enterprises, private, mission, or public (and not infrequently as mixtures of these auspices) with only loosely established relationships, are now overwhelmed. In the new setting they can no longer serve the demands of the changing society, housed as many are in abandoned old houses and churches, makeshift facilities crammed with a heterogeneous population demanding to "learn book". Their autonomous or semi-autonomous existence is no longer possible, for the demands upon them have depleted their resources for functional adequacy.

The compelling need is to bring the schools into a position where the resources available to them can be more efficiently utilized in meeting the demands for schooling, and it falls upon the public schools to take the initiative and lead the way.

Education In the Nation and In the City

In the complex of politically independent states emergent in the scene of West Africa, Liberia with its longer experience in political freedom is no less than the rest pressed to insure its freedom by cultivation of the human talents and skills which give substance to political freedom. Liberia is challenged to increase the 9% of its national budget for education, compared to Ghana's 29%. It must measure its $27. per child expenditure for schooling against the $93 per child expenditure of Sierra Leone. Poverty and ignorance are the twin threats to political freedom, whether long held or newly gained. The future lies not only in modern buildings and industrial works, but even more in cultivation of the human competencies and skills, of knowledge and wisdom, which sustain political freedom and ensure human betterment to a society and its people.

Monrovia, the capital of Liberia, is leading the way from town to city life. So also it first has the task of meeting urban schooling problems. In Monrovia, the precedents will be rooted which will bear upon transitions elsewhere from town to city. It is in Monrovia that the separate indigenous identities of the tribal groups interact, and in the common work of the new life ways acquire from one another an appreciation of the diversity of human capacities; here the fears and suspicions of older life ways can be

transformed into a new security and recognition of common benefit and welfare. Thus the rural and urban areas of the nation are interdependent, and attention to one necessarily involves attentive appreciation to the other.

As the immediate and primary area of urban change, Monrovia schools will affect the future not only of potential cities in Liberia but the extensive rural education program which the country is facing and must meet -- for it is from both the town and the country that its rapidly increasing population is coming. The Monrovia school situation is therefore not a matter apart from the country as a whole but an integral part of the national social and cultural whole, where national identity not only as a political state but as a society and cultural unity is to be cultivated. Improvement of the schools of the capital city is essential to the welfare of the nation.

Need for Further Community Study

The survey team recognizes the dangers inherent in the transfer of elements or orders from one social and cultural context to another. Educational planning must assume that any school system must be adapted in detail to the country it serves. The present report only begins to deal with the full complexity of the social, cultural and ethnological data obtained in Liberia and in the city of Monrovia as it bears on the formal educational system. It was the prevailing view of the survey team that only such factors would be considered at this time as were sufficiently conspicuous to have a direct bearing on the success of the proposed consolidated school project.

In those several instances where social factors were encountered which bore on either the instructional and organizational aspects of the project, note has been taken of them, either by projecting organization and operational structure with them in mind or by indicating problems which need to be worked through by the research and development team during the planning phase of the project.

It is recognized that further careful study of the community must be done if United States technical personnel are to assist Liberians to move toward a modern school program appropriate to their developing nation and to the special characteristics of Monrovia. Pressure of time forced relatively more attention to organizational, administrative, fiscal and operational aspects of the project, but those must be considered flexible enough to permit needed adaptations based on continued study of the matrix of cultural and ethnological factors.

Need for Emphasis on Both Elementary and Secondary Schools

Although the initial information provided San Francisco State College in seeking its services indicated a primary involvement in the development of a public secondary school program in Monrovia, the subsequent assignment of the survey team was broadened to include consideration of elementary schools. Later information indicated budgetary provisions had been made for the construction of a junior high and a senior high school, as well as some less definite commitments for construction of elementary schools in Monrovia. Inquiry into the feasibility of a Monrovia consolidated school system had to include the question of the ability of the lower schools of

Monrovia to sustain the upper schools with an adequate flow of population -- an essential consideration, since a school system is basically an arrangement of feeder groups from one level of schooling to another.

The survey team shortly after its arrival in Monrovia made an extensive tour of the elementary schools and discovered that only one elementary school possessed any reasonable potential for readily achieving standards which would sustain the senior and junior high school areas of a consolidated school system organization. The staffs of the USOM Education Division and the Department of Public Instruction of the Republic of Liberia had emphasized the needs of the lower schools and had become aware of the dependency of higher schooling upon adequate provision being made for the elementary schools. They had, however, not gained as clear and firm fiscal commitments for these schools as they had for the upper schools.

The circumstances of the differentials in fiscal commitments to elementary and secondary schools reflect the rapidly changing social situations of a nation suddenly moving into the orbit of twentieth century industrial-technological society. Its aspirational sights are focused upon the desired benefits and the means to achieve them; that is, in terms of education the trained specialist is seen as a product of the university and higher schools. It remains, however, that a society so oriented must either purchase the services of specialists outside of its own society, or turn its attention to providing the foundations of schooling and educational opportunity across the broad span of its own population if it is to man the range of industrial-technological operations. It is not simply a matter of

acquiring specialists on the highest level, but of education throughout the population which provides a basis for specialized competencies, skills and creative abilities.

In the light of these essentials it is not feasible for Liberia to focus its resources and energies upon its university, colleges, or secondary schools without intensive development of its broadly based elementary schools from which the population of the upper schools must come. A truly comprehensive school system must include balanced emphasis on basic literacy, elementary, secondary and higher education.

III. PROBLEMS IN THE DEVELOPMENT OF A CONSOLIDATED SCHOOL SYSTEM FOR MONROVIA

The Need for Improved Education is Clearly Recognized

The fourth inaugural address of The Honorable William V. S. Tubman, President of Liberia, in January, 1960, boldly states educational aspirations for his country and stresses the urgent need to take steps to realize them. After spelling out in some detail the need for continued broad economic and social development of the nation, the President of the Republic makes clear in his address the need for educated people to participate in their country's development.

> There must be available a sufficient number of trained technicians, scientists, engineers, doctors, and skilled workers to evolve, execute, and carry on the development activity. These in turn must come from a well-trained, literate, and educated public.

In addition to proposing expansion of the University of Liberia and development of a nation-wide training program, the President said,

> Higher education, whether it be vocational, classical, or technical, rests squarely and ultimately on a base of elementary education. Therefore, we shall embark on a national program of mass public elementary education, literacy, and health. Our aim is to wipe away forever the blight of ignorance and illiteracy from the children of this land.

The President charged the Department of Public Instruction to develop suitable curricula consonant with modern world-wide trends yet related to the historical tradition of the people and needs of the country. Problems of teacher shortage were also acknowledged:

"As an inducement to qualified persons to pursue the educational profession as a career, the salary scale and retirement scheme of teachers will be revised and improved."

The Secretary of Public Instruction, The Honorable Nathaniel V. Massaquoi, has also given strong leadership in urging plans for extending school and college educational opportunities to Liberian citizens. In an article in the Phi Delta Kappan, December, 1960, Secretary Massaquoi emphasized commitment to development of individuals. He states:

> Inspired by this belief, we have decided that, while we are trying to develop the country, we want also to develop the human beings for whose benefit the country is being developed. We want to implement an educational program on which may be based a new social order with man and his family at the center. We do not want to live as guests in our own country; we want to be qualified by training and education to run the entire communication program of our country; we want to man the garages, the factories, the railroads, the farms, the teaching faculties of the diversified institutions of learning; we want to pilot the planes; we must be educated and trained to man the ships which ply our 350 miles of coast lines; we must man our hospitals, hotels, offices; we must be able to use all of the gadgets, the instruments, the modern equipment which help to make modern Liberia modern. We do not want to look on with folded hands while this is done for us by our foreign friends. We have refused any association or collaboration with any extraneous group whose aim is destruction of the natural and inalienable rights of man.

Much of the same intent is repeatedly expressed in his public statements in Liberia and in his day-to-day work with his departmental staff. The proposed consolidated school project would contribute to realizing these aspirations.

Existing education laws of the Government of Liberia provide substantial support for efforts to develop a modern consolidated school district. Chapter 4 of the Education Law provides regulatory procedures governing certification and salaries of public school

teachers as well as procedures relative to tenure, retirement and disability. However, approximate prevailing levels of preparation may be inferred from the fact that of twelve salary classes based on level of preparation, six can be met with twelve grades or less of formal schooling. Class XII is established for teachers with "below eighth grade preparation", and under the law, those having completed less than high school, including teacher training courses, can qualify by taking a Department of Public Instruction examination in subjects to be taught.

Recently the legislature took steps to broaden the financial base for support of education and health. Laws are on the books supporting compulsory school attendance between age 6 and 16. Statutes providing for a school supervisor for each county and provincial district to work under the direction of the Secretary of Public Instruction give precedent for a measure of local administrative and supervisory control.

In operation of the proposed consolidated school project, slight modification of Liberian education law would be necessary to authorize the administrative arrangements recommended.

During the current year several steps have been taken to inventory Liberian education and to project plans for educational development. Basic information and initial plans have been developed through cooperative work of United States Operations Mission personnel and the Department of Public Instruction.

At the request of the Liberia/United States Joint Commission for Economic Development, a proposed ten-year education budget for Liberia was prepared by the Liberia/United States Joint Commission for

Economic Development in October, 1960. In March, 1961, the Secretary of Public Instruction in consultation with officials of the United States Operations Mission reported in detail on Liberian educational conditions and needs to the President of the Republic and the Joint Commission.

The proposal for developing a consolidated school project for Monrovia grew out of continuing study and evaluation and is joined with the several other major plans to extend and improve educational opportunities for the people of Liberia.

Available data on school enrollments, school personnel, and facilities for Monrovia and Montserrado County accent the imperative need for bringing order into a disorganized school situation now challenged to meet new problems. Because of continued study and evaluation, both Liberian and United States personnel in Monrovia are sharply aware of the need to develop a modern elementary and secondary education system for the city. The work to be done is extensive if a consolidated city system is to be launched, successfully maintained, and eventually expanded to encompass all of the public school children of Monrovia. The city's growth is moving rapidly beyond existing facilities for schooling. Intensive effort and concentration of resources over a span of three to five years are mandatory if a consolidated district is to gain ground on growing educational problems in the city. Brief assessments of the present situation will provide background for statement of the major problems to be worked through in establishing a city district.

A number of major immediate problems need solution:

Insufficient and Inadequate Facilities

Monrovia has seventeen government elementary schools varying in reported enrollment (for one session) from 44 to 349. The latter figure is that of the relatively modern and well-staffed demonstration school which runs only one session. Total city enrollment, kindergarten-primer through sixth grade, is 5,730.

Beyond the elementary schools, the government schools of the city include four junior high schools, grades 7 - 9, with 357 students; a six-year high school, grades 7 - 12, with 509 students; and two four-year high schools; grades 9 - 12, enrolling 264 students -- a total of 1130 students in grades 7 - 12. The schools vary in size from 43 to 509 students. Though it is estimated that no more than half the school-age children in Monrovia are presently in school, most buildings carry double sessions and several triple, including night programs.

Private and mission schools carry a large proportion of the school enrollment of the city, especially at the secondary level, where enrollment in these schools exceeds that of government schools by about 340 students. Private and mission schools have a reputation in Monrovia for better quality work than do most government schools.

The condition of the public school buildings and grounds, with the exception of the demonstration and laboratory schools, indicates that a modern school program must depend on new school construction. The health and physical safety of the teachers and children cannot be protected in the present buildings, and for the most part classroom facilities are so cramped that an adequate school program could not be developed even with drastic reduction of enrollment and restriction

of number of sessions. Buildings are generally dilapidated or beyond repair. Restroom and sanitary facilities are inadequate and in some buildings entirely lacking. Facilities for keeping and preserving records are so minimal as to be of dubious use or reliability. Buildings originally intended as homes or apartments have since been abandoned for these purposes and have been leased for use as elementary and secondary schools. Other government schools operate in churches or mission schools, most often in spare, crowded spaces, where other functions interrupt the school program. Maintenance in many schools is of no more than token quality as one crowded session follows another. Frequent lack of doors and windows means that classrooms cannot be secured, and equipment and instructional materials cannot be kept or accounted for.

Administration of the Monrovia Schools

The individual public schools in Monrovia are administered by principals, some of whom are teaching principals. Where buildings carry more than one session per day, principals are assigned to each session with separate faculties -- sometimes with a supervising principal for the building. The large number of small schools scattered through the city complicates the administrative problems.

The absence of any local city administration means that the operational problems of each principal and his faculty are by default imposed directly upon the Secretary of Public Instruction of the Republic of Liberia and his staff. Schools, other than the demonstration school, have no specific budget. Personnel assignments, transfers, retention, and hiring are thus done through the

Department of Public Instruction and supplies are dispensed from the Department. Students must purchase their books from a central store, pay a registration fee and present themselves at school to become enrolled. There are no class limits consistently placed on any classroom unit,which results in heavy overcrowding, especially in the pre-school and early grades.

The responsibility for such supervision of the Monrovia schools as is provided falls upon staff members of the Department but is necessarily limited in coverage because of the nationwide scope of their duties. In addition, Montserrado County, in which Monrovia is located, has one supervisor appointed by the Secretary of Public Instruction, as does each county.

This centralized arrangement has come under severe strain as the Liberian education system has expanded. The time of the departmental officials is taxed with day-to-day administrative and supervisory problems of individual schools and school personnel. Time spent in procuring help and decisions from the central office diminishes the effectiveness of school operations, as school principals appear to have insufficient jurisdiction over personnel and resources to be able to plan adequate programs of instruction. Coordinated on-the-spot supervision and consulting help are badly needed.

Numerous educational officials, principals, and teachers who were consulted stressed the importance of improvement of the management of the schools and of the need for more careful allocation of responsibilities and effective use of administrative and teacher energy,and other resources.

at the school building level for pupil accounting and record keeping, for faculty and staff work, for building maintenance, and for control of even the meager supplies. Teachers maintain class rolls and some schools seek to keep reasonably accurate student rosters. Inadequate storage facilities and absence of clerical help contribute to the difficulties.

Instructional Personnel

During the limited period of the survey, it was not possible to make accurate assessments of the availability of qualified teaching personnel. Observations and available information indicate that intensive efforts will be needed both in recruitment and in-service preparation before Monrovian children and youth can attend public school with assurance they will be taught by teachers with adequate preparation both in the appropriate fields of instruction and in the professional work of teaching.

More than half of the elementary school teachers of Monrovia are reported as having completed less than junior high school level work in their own formal schooling. Only a handful have completed a professional program of preparation for teaching. Few secondary school teachers, apart from the University Laboratory School, have completed degree majors and a teacher preparation program. Many of the best qualified teachers are employed by the private and mission schools, where salaries are reportedly better and working conditions more conducive to teaching satisfaction. Inappropriate assignments lessened the effectiveness of a number of teachers. On the other

hand, many experienced teachers were observed and interviewed who were striving to do conscientious jobs and showed deep interest in possible opportunities to improve their teaching and their own background. There is need for consistent policies to guide teacher placement as to salary, based on clearly understood criteria.

Salaries, beginning at $30 per month, cannot compete with other employment in government and commerce where educated persons are in demand. The median figure among those reported for government schools in Monrovia was $40. The top teacher salary, $200 per month, reported for only two teachers, is too low to enable teachers to purchase adequate housing and maintain a minimum standard of comfort as professionals in Monrovia at the present level of living costs. Teacher frustration is high, and teacher absenteeism is reportedly a serious problem.

There appeared to be few available personnel with preparation in the practical and fine arts and in the sciences, and there was general agreement among Liberian education officials that extension of the curriculum in these directions must depend heavily on teachers recruited from outside Liberia. Persons with preparation and experience in student guidance and counseling are also lacking.

Since the success of a school program hinges on adequate personnel who function with high morale, major attention must be given to staff development in the proposed consolidated district and to establishing supportive working relationships and supervisory arrangements.

The research and planning phase of a consolidated school project must provide for a careful inventory of available personnel, plans for most effective assignment, and in-service work designed to

6. Some effort has been made to group together children of various ages in classes referred to as "pre-school" -- actually English readiness classes.

This complex of problems indeed merits much more extensive study and experimentation in grouping, in preparation and use of teaching materials, in adaptation of instructional procedures, and in recognition of the insights and competencies needed by teachers. A carefully designed program should produce gains in student achievement and in reduction of drop-out rates.

The Monrovian schools are struggling to accommodate at least three distinct groups of students, the usual age-grade level groups of elementary and secondary school students living with their families; the in-migrant "orphan" children and youth from outlying villages who stay with Monrovia families in order to attend school but whose work duties enable them to attend school only part of the day, and young adults whose work schedules allow attendance only at evening classes. More careful assessment of the educational aims and potentials of each of these groups is needed.

Monrovia schools suffer a serious imbalance in the grade distribution of the school population. Data for Liberia show an estimated school-age population of 225,000 of whom 61,500 are in school. But of this number more than one third are in pre-school classes. The loss from pre-school to first grade for the nation is stated as 58 per cent. Fewer than five per cent of the high school age children are enrolled. In Montserrado County, reports of public school enrollments for June, 1961, disclose a rapid dropout of elementary school children. Enrollments for first grade total 1223, fourth

grade 582, and sixth grade 342. Girls comprised a bare one-fourth of the reported fourth grade enrollment. The twelfth grade enrollment in Monrovia government schools was 58 with another 115 seniors in private and mission schools. The under-enrollment of girls throughout the grades and the rapid dropout by the middle elementary years pose a serious problem, particularly in an urban setting.

Direct observation of Monrovia schools showed kindergarten and first grades ranging in enrollment from 75 to over 200 students under one teacher's supervision, sometimes aided by a teacher's assistant. On the other hand, upper grade and junior high classes frequently were under-enrolled with four to ten students in a class.

Efforts to extend the years of schooling for each student and more efficient use of limited financial and personnel resources are crucially important in meeting Liberia's shortage of educated people.

Curriculum and Instruction in Government Schools

The instructional program at the elementary school level is faced with many adverse factors which should be alleviated by a program designed to meet the specific problems in an orderly, meaningful way. Specific solutions are beyond the scope of this survey report, and must await the detailed study and planning work which should be the primary assignment of the first group of technical personnel going to Liberia under such a project as recommended here.

In broad categories, the problems are these:

1. The need, on the part of many children and young adults, to learn English or greatly improve their use of oral English, as a basis for learning to read and write English.

2. The need to alleviate serious overcrowding in the early grades in uncomfortable classroom settings, where in many instances, there is insufficient seating for the number of children present.

3. The need for working materials and room in which to work, to eliminate the forced confinement to rote learning and repetitious choral recitation.

4. The need to have instructional materials beyond the limitations of the American and European texts now purchased or rented by the children, whose content is sometimes inappropriate for use by Liberian children. More crucially there must be enough instructional materials and supplies to go around. Even chalk was in short supply.

5. The need, as widespread agreement among Liberian educators indicated, to broaden the curriculum throughout the schools to provide more work in the applied areas, that is, vocational arts and fine arts. At present, available textbooks tend to control the courses and character of grade arrangements of the schools at all levels. The curriculum, apart from the demonstration school and secondary laboratory school,is almost entirely academic, though some attention to group singing was noted and schools attempt brief periods of physical education, largely calisthenics.

6. The need in citizenship education and in the social studies for materials rooted in the culture and traditions of Liberia and Africa. Some work is currently under way under the leadership of the Department of Public Instruction personnel to develop more appropriate materials, and should be given substantial encouragement and support.

7. The need to investigate the desirability of a program of student activities beyond the classroom,which at present is poorly developed. Despite the difficult learning environment, the behavior of students and their alert responsiveness was impressive. In several instances in which teachers were absent, classes were continuing their work under the leadership of a student from the class. Such constructive attitutde and enterprise should be given full scope.

IV. EDUCATIONAL GOALS IN LIBERIA AND IN MONROVIA

Available information indicates that the Republic of Liberia is basically interested in establishing a comprehensive educational system to develop its human resources in order that the maximum potential of the country can be realized. Any development of a school system for Monrovia must necessarily be in harmony with national goals for education, including the following points:

National Goals

1. Provision for the elimination of the present high rate of illiteracy.

2. Provisions to meet the basic personal, educational and social needs of the entire population. Liberia has a long cultural heritage with inherent strengths and diversities. From this base the present educational program must be strengthened and extended to include new and modern ideas and techniques through which Liberia can function as a nation on an equal basis with other nations of Africa and of the world. Liberians can thereby be prepared to assume responsibility for the economic and civic development of their own country rather than continuing their dependence on the personnel and resources of other nations.

3. The development of the individual talents of Liberian people to assure the best use of basic resources of the country. In addition to basic literacy and responsible citizenship, individuals must be

educated to perform competently in a diversity of tasks. They must be prepared as professional persons, highly skilled technical persons, competent business leaders, skilled workers, skilled artisans and craftsmen and a competent general work force. Concurrently, schooling must include knowledge and understanding which will motivate individuals to raise their standard of living in nutrition, hygiene, sanitation and housing. The development of such diversified manpower can form the basis of a forward looking program of economic development and the effective use of natural resources.

4. Provision of high quality educational opportunity at all levels at a minimum cost to the individual. Present registration fees, tuition fees, and cost of books and school supplies are beyond the ability to pay of a large portion of the school population, and the present physical facilities can properly take care of only a fraction of those enrolled. School opportunity must be equalized in order that all children can attend schools related to their appropriate levels of development and be assured with the proper materials with which to work.

5. Provision for a more effective administrative organization at the national, province and county, and local level, with firm budget appropriations at each level administered by each level. At present the responsibilities of the national Department of Public Instruction are both too great and involve too many specifics to avoid diffusing much of its professional leadership. Budgets for education are too small and not keeping pace with neighboring countries. Careful restudy of public revenues is needed to insure a high priority for education with the maximum support possible. In order that

effective planning may be done, education budgets should be projected on a firm long-term basis.

6. Provision for extensive public information regarding the importance of a strong public education system for Liberia. Although there is a high level of motivation among the people for education, the wide functions of education as it affects the opportunities of the people and the nation need to be clarified and more fully understood. The strength to be drawn from consolidation of many expensive small school units into large units also needs clarification with the general public. Use of newspapers, radio and community meetings needs to be intensified in that all may gain better understanding.

The development of a school system in Monrovia should reflect these national goals and at the same time provide an example for the nation of effective school organization and high quality program. Cited briefly below are specific objectives which should be considered for the Monrovia School System.

Organization and Administration

1. Development of a coordinated school program in Monrovia in both the elementary and secondary levels to function under a single administrative staff. Such an aim should include not only the development of new schools, but provide opportunity for participation of any public, private or mission schools which meet established standards of operation and instruction.

2. Establishment of budget and fiscal policies which insure proper personnel procedures, adequate supplies and instructional materials, and proper maintenance of physical facilities.

3. Construction of economical, modern, functionally designed school buildings, located on sites appropriate to the school programs and in relation to the student population centers of the city.

4. Establishment of policies controlling student admission to and retention in school, and provision for the equitable use of space both in the present limited facilities and in new buildings to be constructed.

5. Long-range development of a program of free education at both the elementary and secondary levels for both children and adults, designed to serve the entire population regardless of individual economic circumstances.

Curriculum and Instruction

1. Development of a comprehensive curriculum at both elementary and secondary school levels. The curriculum should have sufficient breadth and diversified content in both the academic and applied areas that students leaving the schools will have a wider range of alternatives available in areas of occupational choice and possess more resources for participation in civic activities. The curriculum should also assist students in working through the many personal and family problems which confront the citizens of a rapidly changing nation.

2. Development of a progressive literacy program designed to help students of all ages move as rapidly as possible into a level of school work appropriate to their maturity.

3. Inauguration of a work-study program for students needing financial assistance while in school. Such a program could help

carry on the work of running and maintaining the schools while providing valuable supervised work experience for students.

4. Development of adult education at both elementary and secondary levels to complement and eventually supplant work at the University of Liberia, where at present it seems to be inappropriately placed.

5. Establishment of a program of research and evaluation for improving the curriculum at all levels and for the development of needed instructional materials.

6. Establishment of a student personnel program in order that each school may provide needed services in the areas of guidance, counseling, student activities, student health,and student evaluation.

Personnel Administration

1. Establishment of explicit criteria and procedures for selecting and appointing and placing all personnel, both professional and otherwise, employed by the Monrovia Consolidated School District.

2. Development of appropriate salary schedules, a personnel accounting system and contractual employment arrangements among all categories of personnel, based on the best personnel practices for other technical and professional groups in Liberia.

3. Provision for a coordinated program of in-service education for both professional and non-professional personnel in order that all aspects of the school system will be staffed with competent people. This program should also include use of staff in the planning of programs and the development of policies designed to increase the strength of the school system. Supervision and in-service education

should be directed toward the rapid assumption by Liberian educators of all the complex responsibilities of a modern city school system.

4. The establishment of clear standards for evaluating the services for both professional and non-professional employees of the school system in order that the background, training and experience of all teachers, administrators and related personnel may be utilized to the maximum.

V. PLAN FOR TECHNICAL ASSISTANCE

In view of the needs set forth in the foregoing chapters, it is clear that more than one plan of assistance might be conceived. The survey team has weighed various possibilities in arriving at the plan which follows and has taken account of the earlier work done by the Department of Public Instruction and the Education Division, USOM/Liberia.

To assist the Government of Liberia by establishing a consolidated school system in Monrovia; to operate the system, provide additional training for Liberian school personnel, and transfer administrative responsibility to Liberians as rapidly as possible, the survey team recommends an operational plan as follows. The plan is described in two parts: (a) scope of the project, and (b) timing, phasing and personnel.

A. SCOPE OF PROJECT

Direct assistance is necessary for both elementary and secondary schools, concentrated in an intensive effort. The project should include four major activities, undertaken in a coordinated manner: (1) construction and equipment of school buildings, (2) preliminary research and planning as a basis for program development, (3) in-service training of school personnel, and (4) operation of the school system.

1. Construction and Equipment of School Buildings.

Buildings adequate to the beginnings of a consolidated system should be erected and equipped through joint efforts of the U.S. and Liberian governments. The following new buildings are the minimum recommended for the beginning of a system which can serve the present Monrovia population, operating on double sessions:

Five elementary schools, each one designed for 300 to 500 pupils each session, the size of each school depending on the size of the site which is acquired.

One junior high school designed for 1,000 pupils each session.

One senior high school designed for 500 pupils each session.

The combined capacity of these seven buildings, operating on double sessions, would be approximately 6,600 pupils. When they were in operation, supplemented by such existing government school as continue operation and by church mission schools, the total capacity of schools in the city would still be less than needed to provide for all of the estimated 16,000 school age children presently in Monrovia.

Progress made earlier this year in selecting and securing approval of suitable building sites should be consummated by final acquisition of the sites. This action should have high priority, as success of the other parts of the project depends on it. Every effort should be made to extend site boundaries at the time of acquisition and to resist any pressures to cut back their areas, avoiding if possible the need in future years of enlarging them at exhorbitant expense.

If it is necessary for some buildings to be erected before others, the elementary schools should have priority along with the junior high school. Even though plans for erecting the junior high school building may in some respects be further advanced, it is necessary that efforts should be directed to bringing the elementary school construction into a lead position. A base of elementary feeder schools is essential to success of the secondary schools. Plans for bringing in contract personnel as outlined in Section B below tentatively estimate that the elementary

buildings might be completed by April 1, 1963, the junior high school by August 1, 1963, and the senior high school by August 1, 1964.

It is assumed that the building construction would be funded and otherwise arranged between the U. S. and Liberian governments. Contracts necessary for the buildings should be executed with other agencies than a U.S. college or university. A contract with a U.S. college for assistance in developing the consolidated school system should, however, include consultation on plans for the buildings and development of grounds, consultation on on-the-spot problems as construction proceeds, and the preparation of lists and specifications for equipment and furniture for the buildings, with the actual procurement to be done by the Government of Liberia and USOM/Liberia as appropriate.

The three other major activities outlined below, preliminary research, selection and in-service training of personnel, and operation of the school system, should be undertaken by contract between the U.S. Government and a college or university.

2. Preliminary Research and Planning.

As a basis for planning and development of the project in detail, intensive community study of Monrovia, especially population, cultural features, and economic opportunities, is necessary. Adequate research is of the highest importance in planning a curriculum and a school system that will be genuinely appropriate. Community study and development of findings into preliminary policy guides should be the major activity for some months of the first group of personnel sent to Monrovia under a college contract and thereafter should be a continuing part of the project.

3. Selection and In-Service Training of School Personnel.

Successful operation of a unified city school system requires thoroughly trained personnel in administration, supervision, teaching, and auxiliary school services, in numbers well beyond those now available in Liberia. An intensive training program should be begun early in the project, while buildings are under construction. The program should provide opportunity for in-service professional study by teachers now employed in existent schools or seeking employment. It should be directed to providing people to staff and operate the new plants as they are completed, also to identifying leadership personnel for further training for administrative and supervisory duties.

The training should be distinct from the pre-service training in the School of Education of the University of Liberia and other existing institutions. It should be supplementary to them and pointed directly at the needs of the new Monrovia school system. It should be in charge of a Director of Training who is a senior member of the project staff.

During the first year of the project while buildings are under construction, training activities should be located in the project headquarters building. Space should be provided for a workshop-type meeting room, a curriculum materials center, and work space for typist-stenographers in training as school secretaries. When buildings are completed and the school system begins operation, the training program should be expanded and much of it carried on in the school buildings on an apprenticeship or internship basis. Meanwhile headquarters facilities should continue on use for seminars. Expenses of this training, other than support of U.S. technicians, should be a responsibility of the Government of Liberia.

The following types of training are recommended:

a. Teacher Education. This training should be directed toward problems now encountered by Monrovia teachers, especially the need for development of instructional materials and training in the use of up-to-date materials. It might be carried out with groups of twenty to twenty-five teachers and principals meeting in the workshop center in afternoon or evening. Two such sessions a day, four days a week, would provide training for 160-200 teachers at one time with a practical focus that should result in immediate gains in Monrovia schools. At the same time, as the training staff became acquainted with the teachers, selection would be begun of personnel for advanced leadership training.

b. Leadership Training. To provide personnel for administrative and supervisory responsibilities, twenty to thirty persons should be selected the latter part of the first year and early the second year from teachers and principals participating in the in-service program. Additional persons would need to be added to this group as the project proceeds. Three kinds of training are envisaged:

(1) Special classes and seminars under the direction of a specialist in school leadership training.

(2) Internship assignments in the schools after the new buildings are in operation. Internship assignments would continue for some years, until the project reached the stage of full transfer of responsibility to Liberians prior to withdrawal of U.S. personnel. The function of the internship program would be comparable to that of a counterpart system. However, instead of being assigned to permanent positions at first, Liberians would be assigned among various administrative and supervisory

positions, as assistants to the U.S. specialists administering the school system. Typically a trainee would be assigned to more than one position in turn, the specific positions being selected to supplement his previous training and experience. Development of broad professional competence would be based on acquaintance with the range of problems of the entire system. Interns would be paid full-time stipends by the Government of Liberia.

(3) Participant training in the U.S. Ten to fifteen persons should be selected, after some internship training, for advanced professional study in the U.S. These would be sent as a group to the campus of the contract institution operating the project. There they would be under the guidance of a faculty member who had been previously on the project staff in Liberia, who would work with them in orientation, program planning, and arranging experience and special study in U.S. schools and possibly other colleges or universities as might be appropriate.

Other groups might be selected and sent for participant training in subsequent years.

c. Specialist training, especially for library and school health and nursing personnel. A limited number of persons should be selected for training in specialties required by the school system. This training would be to some extent through classes and seminars, but especially through internship after the schools are in operation, and might possibly include some participant training in the U.S.

d. Training for auxiliary school services, especially school secretaries, custodial and maintenance personnel, and cafeteria personnel. Training of school secretaries should be begun from the start of the project by the employment of Liberian typists and stenographers. They would do clerical work for the project, and would also be in training for special school responsibilities under the direction of experienced secretarial administrative assistants on the project staff. Two to four would be employed at the beginning, the number increasing to ten or twelve when the project entered the phase of in-service teacher training and processing specifications for equipment and supplies for the new buildings. When the school system began operation, secretaries for the central school office and for the school buildings would be selected from among these trainees. Their training would continue in the school system on an apprenticeship basis under the direction of the school principals and a supervisor of school secretaries for the system. As secretaries were assigned to schools they would be replaced in the central pool by new trainees. Considerable attrition among this group of personnel may be expected from the attraction of other employment opportunities. Their salaries would be paid by the Government of Liberia, and should be at a sufficiently high scale to keep attrition to a minimum.

Training of custodial, maintenance, and cafeteria personnel should be on an apprentice basis when the new buildings are ready for occupancy, under the direction of the school principals and a maintenance and security officer and a cafeteria supervisor for the system.

4. Operation of the School System.

The project should provide an experienced U.S. city school

administrator as superintendent employed under the college or university contract to operate the consolidated school system with appropriate personnel on the contract staff to assist him. The superintendent should have authority over budget, employment, supervision and retention of personnel employed by the system, both U.S. and Liberian. Operating expenses of the system, other than salaries of U.S. personnel on the contract staff, should be provided by the Government of Liberia, with the superintendent having authority for expenditure of funds in accordance with the authorized budget. The superintendent would report directly to the Secretary of Public Instruction regarding operation of the system. Review and approval of policies proposed by the superintendent would be invested in a board for consolidated school system. It is envisaged that this board would be the forerunner of a district board of education whose composition would have to be determined at a later date. For the present, the survey team recommends that the board be composed of five persons, as follows: The Secretary of Public Instruction, Government of Liberia; the Chief of the Education Division, USOM/Liberia; the Chief of Party of the contracting college; and two other members to be appointed by the Government of Liberia.

In operating the schools the superintendent and his staff should direct their attention to the development of administrative procedures, the development of curriculum and program, the establishment of personnel policies and procedures, and developing the capital outlay program and operating budget of the system.

The estimate of personnel required under a college oontract assumes that a well-functioning, modern city school system is to be developed from the ground up--an operation serving initially close to seven thousand

pupils, with more than three hundred teachers and necessary administrative, supervisory, and auxiliary services in each building and for the city system as a whole. This system has to be developed in a radically complex and changing urban setting in which there is no precedent for such an operation and at present only meager facilities either in physical plant or in the experience of Liberians.

In the success of the whole operation, a most important factor which cannot be estimated confidently until more information is at hand, is the extent to which there are professionally qualified Liberians available in sufficient numbers to man the administrative and supervisory positions of the school system. The survey team became acquainted with a number of educators, experienced in the operation of present Liberian schools, many with advanced professional training abroad. A consolidated Monrovia school system would demand many more such persons than appear to be available, in the face of need for them in other towns, in rural education, in the national responsibilities of the Department of Public Instruction, and for other national needs. Even where persons were available for service in the Monrovia school system, it might be advantageous for them to work in internship positions looking toward the higher administrative posts in the school system in preference to being assigned simply to positions for which they may be qualified at present.

Hence personnel estimates are on the basis that all key administrative and supervisory positions are to be filled at first by U.S. contract personnel, the total number estimated at forty-nine when the system is in full operation with five elementary and two secondary schools on double sessions, and a central office. Estimates call for Liberian teachers,

except for a minimum at the secondary level in special fields where Liberian resources are most lacking. In any positions for which qualified Liberians may be found, it would not be necessary to bring over an American. In some cases it may be feasible to terminate a contract position much earlier than anticipated. But to ensure the success of the project, the contract should be funded to include U.S. personnel as described below.

To work directly with the superintendent, the contracting college should provide central office personnel including three assistant superintendents, each with necessary administrative assistance:

Assistant Superintendent, Business. Accounting and payroll; maintenance, security and custodial service; supplies; and supervision of cafeterias and of school secretaries.

Assistant Superintendent, Instruction. Oversight of instructional programs in the schools, including school health, pupil personnel, and library services.

Assistant Superintendent, Professional and Staff Personnel. Records and recommendations on qualifications and assignment of personnel employed by the school system.

For each school building the contracting college should provide a principal and an assistant principal, and in addition pupil personnel and guidance specialists for the junior high school and the senior high school.

It is estimated that a limited number of regular staff contract personnel should be provided whose duties would include classroom teaching in certain special fields such as science and mathematics, industrial arts, home economics, and commercial education.

As special consultants, the contracting college should also provide a limited number of short-term staff members serving less than one year, specialists selected as needed from among the following areas: industrial arts and crafts, home economics, science and mathematics, commercial education, foreign language, art education, physical education, music and drama education, educational psychology, and leadership training.

The central office and the school buildings should be staffed with sufficient secretarial, clerical, custodial, maintenance, and cafeteria personnel, their salaries paid as normal operating costs by the Government of Liberia. Except for a minimum of U.S. teachers in special fields, teaching positions should be filled by Liberians.

5. Essential Related Activities.

Besides the major undertakings just described, certain other activities would be necessary to the success of the project:

a. In the development of school policies in Liberia, part of the responsibility of the project would probably be that of proposing and assisting in drafting appropriate legislation.

b. In the interests of public understanding of the new school system the project should also be concerned with the development of a public information program, in cooperation with appropriate Liberian agencies.

c. To ensure that the school system is articulated with other activities of the city and nation, members of the project staff as appropriate should communicate with personnel of other educational agencies, with business organizations, and other governmental agencies. Some visits to other parts of Liberia and to nearby countries should be desirable to ensure that school developments are suited to the position of the capital

city in the nation and to the nation's interests and aspirations in West Africa.

B. TIMING, PHASING, AND PERSONNEL

Preliminary Summary

If significant progress is to be made, intensive effort over a period of time will be required, with enough personnel both to establish and to operate the new school system. Major development of the project is seen as requiring a period of approximately five years, followed by withdrawal of contract personnel and transfer of the system to full Liberian administration as rapidly as circumstances permit. The process of development and transfer would proceed through four major overlapping phases, as summarized below. For the first two phases time estimates can be reasonably close, contingent on building construction, but the last two stages can be indicated only as very rough approximations. Contract personnel brought over in each phase would remain in the project, the new personnel of later phases being added to them cumulatively, up to a total of forty-nine contract positions.

Phase I. Planning and development period. While buildings are under construction, the first contract personnel would be engaged in community study, curriculum design, teacher education, and administrative organization including fiscal and teacher personnel policies. Duration of this phase is estimated as fourteen months, beginning approximately January 1, 1962.

Phase II. Operation of the consolidated school system. Contract personnel would be engaged in fiscal and budget operation, administration of staff, curriculum development, pupil personnel services, professional

development of teachers and administrators, and continued study of school problems in Monrovia with modification of project plans as necessary. Three years is estimated for this phase, beginning approximately March 1, 1963. It is anticipated that this phase would make full use of qualified Liberian personnel.

Phase III. Continuing transfer of administrative responsibility to Liberians. Contract personnel would be transferred step-by-step to advisory roles or to other positions. While this phase will overlap Phase II, the distinction between the two phases is that in Phase II the major emphasis would be on establishing the school system as a going concern, while in Phase III the major emphasis would be on transfer of responsibility. Some phasing out of contract personnel should be accomplished during this period.

Phase IV. Final withdrawal of contract personnel. This phase would begin when programs of participant training abroad had been completed and most of the contract personnel had been transferred from administrative to advisory roles. The duration of this phase cannot be predicted at present, but it may be hoped that systematic withdrawal of contract personnel might be under way by 1967. Every effort should be made to withdraw contract personnel as early as practicable.

An initial contract with a college or university would encompass only enough time to bring the project well into Phase II. Before any extension of such a contract, the phasing estimates above should be carefully reviewed and revised as may be necessary.

Personnel required within each phase are estimated as follows: (Regular staff positions are numbered consecutively and are continuing positions until phase-cut is shown).

Phase I. Planning and Development

I-a. Preliminary Research and Planning. Beginning as soon as a contract has been signed and housing and office space is ready for first personnel. Seven technicians would make up the first group as follows, beginning approximately January 1, 1962. They would continue into Phase II, assuming responsible administrative and supervisory functions in the consolidated school system and in the in-service education program.

1. Chief of Party.

   Oversight of the project as a whole; liaison with USOM, Government of Liberia, and other Liberian agencies; development of policies and procedures for contract staff; care and oversight of contract personnel.

2. Administrative Assistant.

   Provide administrative assistance to the chief of party; set up office procedures and records systems; handle records, reports, and correspondence for contract personnel; plan and begin supervision of Liberian typist-stenographers to be trained as school secretaries.

3. Specialist in School Business Administration.

   Conduct inquiries and establish relations leading to fiscal policies and procedures for the consolidated school system; liaison in expediting building construction. In addition, set up and handle payroll and accounts for contract personnel; logisties liaison with USOM on housing, office, transportation, and equipment.

4. Specialist in Curriculum Development - Elementary.

5. Specialist in Curriculum Development - Secondary.

6. Specialist in Curriculum Development - Vocational Education.

7. Specialist in Pupil Personnel - Evaluation.

These four technicians would constitute a research team for intensive community study, which would be their major concern for about six months. The study would provide guidance for educational objectives, curriculum design, school facilities, pupil placement and guidance, and in-service training, by gathering basic information on such points as occupational potentials in Liberia, educational aspirations of parents and children, connections between cultural patterns and population groups in Monrovia, present age distribution and achievements of pupils, and present qualifications and aspirations of Liberian teachers. One of the four would be selected for special competence in community research and would continue in later phases to carry responsibility for continuing less intensive research as required.

For the project to be a joint U.S.-Liberian effort from the beginning, it would be desirable for the Government of Liberia to assign two or three Liberians to participate in the research and planning activities of Phase I-a under the direction of the contract Chief of Party. The individuals should be selected by agreement among the Secretary of Public Instruction, the Chief of Education Division USOM/Liberia, and the Chief of Party, and their salaries paid by the Government of Liberia.

The research and liaison activities of Phase I-a should result in definitive conclusions as to the composition of the policy board for the school system. This board should be constituted by Government of Liberia action toward the end of this phase to provide policy guides for the

involvement of Liberian teachers and administrators in the in-service training program of Phase I-b and for the provision of Government of Liberia funds in support of the operating expenses of the in-service program.

I-b. Begin In-Service Training; Specify Equipment for New Buildings. Beginning when building construction is under way; housing for personnel, office space, and in-service training facilities are available, and policy board has been constituted, approximately July 1, 1962.

At this time a program of in-service teacher education can be begun; intensive planning of curriculum, pupil personnel services, and teacher personnel administration can be undertaken; and equipment and supplies for the new buildings can be specified and ordered. The technicians of Phase I-a would assume the major responsibility for the teacher education program. In addition ten more regular staff members would be needed, as follows, bringing the cumulative total in the project to 17:

8. Specialist in School Business Administration.

   Supervise the processing of equipment specifications and lists; liaison with USOM on ordering and installing equipment and supplies; establish policies and procedures for plant maintenance and security and for issue, accounting, and replacement of supplies.

   This technician and the business administration specialist brought in earlier should continue into Phase II, one as business manager for the contract party and one as assistant superintendent for business of the consolidated school system.

9. Administrative Assistant - Business.

   Provide administrative assistance to the business administra-

tion specialist above in records and correspondence on fiscal organization, plant equipment and supplies for the school system; joint responsibility with the earlier administrative assistant for oversight and training of Liberian secretaries.

10. Specialist in Curriculum Development and Supervision of Instruction.

    Oversight of curriculum planning for the new system and articulation with pupil personnel services and with specifications of equipment and supplies. This technician should continue into Phase II as assistant superintendent for instruction of the consolidated school system.

11. Administrative Assistant - Instructional Program.

    Provide administrative assistance to the specialist in curriculum development and supervision, in records and correspondence on curriculum development, supervision, and pupil personnel planning.

12. Specialist in Curriculum and Supervision - Elementary.

    Planning of curriculum, equipment and supplies for elementary schools; collateral responsibilities in the in-service program.

13. Specialist in Curriculum and Supervision - Secondary.

    Planning of curriculum, equipment and supplies for secondary schools; collateral responsibilities in the in-service program.

14. Specialist in Pupil Personnel Services.

    Develop policies and procedures for pupil personnel services (evaluation, placement, guidance); collateral responsibilities in the in-service program.

15. Specialist in Library Services.

Develop policies and procedures for school libraries; specification of equipment, supplies, books and periodicals for the new buildings; oversight of the training of library personnel.

16. Specialist in Health Education and School Health Services.

Planning of curriculum, specification of equipment and supplies; liaison with the pupil personnel specialists on school health services; collateral responsibilities in the in-service program; oversight of training of school health personnel.

17. Specialist in Instructional Materials.

Primary responsibility in the in-service training program; collateral duties in curriculum planning and in specification of equipment and supplies for the new buildings.

I-c. Establish Administrative Structure for the New School System.

Beginning when a firm completion date can be forecast for at least three buildings to be completed and ready for occupancy within three months, and office space for central district headquarters is available, and housing for new personnel.

Four technicians as follows, beginning approdimately January 1, 1963, and continuing into Phase II. The cumulative total in project would now be 21.

18. Specialist in City School Administration.

Superintendent of the Monrovia Consolidated School System. Administrative oversight over all units of the school system,

pre-primary through twelfth grade; fiscal, management, and personnel policies and procedures; establish working relationships with the Secretary of Public Instruction and the DPI, the Chief of Education Division USOM/L, and his staff, and the contract Chief of Pary and the research and in-service program of the contract party.

19. Administrative Assistant -- Consolidated System.
Provide administrative assistance to the city school superintendent; set up office procedures; oversight of central office records, reports, and correspondence.

20. Specialist in School Administration -- Staff Personnel.
Assistant superintendent for professional and staff personnel, of the consolidated school system. Establish policies and procedures for administration of teaching, administrative and supervisory personnel. Make recommendations to superintendent on selection, employment, retention, advancement, and dismissal of personnel. Liaison with contract party director of training; participation in selection of candidates for participant training abroad.

21. Administrative Assistant -- Staff Personnel.
Provide administrative assistance to the assistant superintendent for staff personnel. Set up office procedures and records systems; handle records, reports, and correspondence; take part in training and supervision of school secretaries.

Short Term Staff Members--Phase I. In addition to the regular staff members listed above, it may be anticipated that specific tasks would arise which could best be served by a specialist in a particular field assigned to the project for less than one year. Such special tasks might arise in connection with equipment and supplies, curriculum development, or teacher education, either to reinforce or supplement the work of regular staff positions in any one fiscal year. Short-term staff might be selected from any of the specialties listed above for regular staff members, and in addition among the following areas:

Home Economics

Industrial Arts and Crafts

Science and Mathematics

Commercial Education

Foreign Language

Physical Education

Music and Drama

Adult Education

Educational Psychology

Leadership Training

Phase II. Operation of the School System

Estimates for this phase assume the completion of five elementary schools at about the same time, followed by the junior high school, and finally the senior high school. If the buildings were actually completed in a different order, phasing of personnel should, of course, be adjusted accordingly.

II-a. Operation of Five Elementary Schools. Beginning when a firm date can be forecast for at least three buildings to be completed and ready for occupancy within one month, and housing is available for new personnel.

Fifteen technicians as follows, beginning approximately March 1, 1963 and continuing through Phase II. (Cumulative total in project, 36)

District Office Staff:

22. Accounting and Payroll Officer.

23. Maintenance, Custodial, and Security Officer.

24. Supply Officer.

25. Cafeteria Supervisor.

26. Supervisor of School Secretaries.

These five technicians, under the direction of the assistant superintendent for business, would constitute an administrative staff for the business department of the school system. In their respective areas, each would have responsibility for setting up and operating up-to-date, efficient procedures, training and supervising non-certificated personnel, and assisting directly in the in-service professional education of administrative-supervisory interns.

27. Specialist in Health Education and School Health Services. Work with the other health education specialist as an administrative staff for school health program; training and supervision of school health personnel. Special responsibility for program and personnel in the elementary schools.

Staff for Elementary School Buildings:

28.)
)
29.)
)
30.) Specialists in Elementary School Administration.
)
31.)
)
32.)

Each of these technicians would be the principal of an elementary school building with immediate responsibility for all aspects of its operation, both sessions, including in-service training activities carried on in the building.

33.)
)
34.) Specialists in Curriculum and Supervision - Elementary.
)
35.)
)
36.)

Each of these technicians with the addition of a similar specialist brought in earlier (No. 12) would be the assistant principal of an elementary school building with special responsibility for supervision of curriculum and pupil personnel services; close liaison with the in-service education program of the contract staff.

II-b. Operation of the Junior High School. Beginning when a firm date can be forecast for the junior high school building to be completed and ready for occupancy within one month, and housing is available for new personnel.

Nine technicians as follows, beginning approximately July 1, 1963 and continuing through Phase II. (Cumulative total in project, 45).

District Office Staff:

37. Specialist in Library Services.

Work with the other library specialist as an administrative staff for school libraries; training and supervision of library personnel; consultant service to teachers on library utilization.

38. Specialist in Health Education and School Health Services.

Work with the other two health education specialists in administration and supervision of school health services and training of personnel; special responsibility for secondary schools.

(The addition of these two technicians should complete the need of contract personnel for central office staff for the school system.)

Staff for the junior high school building:

39. Specialist in Secondary School Administration.

Principal of the junior high school with immediate responsibility for all aspects of its operation, both sessions, including in-service activities carried on in the building.

40. Specialist in Pupil Personnel and Guidance (Male).

41. Specialist in Pupil Personnel and Guidance (Female).

These two technicians would share responsibility for the pupil personnel services of the junior high school, especially the supervision of the counseling program and the training of teacher-counselors; close liaison with the in-service education program of the contract staff.

42.)
)
43.)
) Curriculum Specialists and Teachers in Special Fields.
44.)
)
45.)

The following special fields are envisaged at present, subject to modification:

Science and Mathematics

Industrial Arts

Home Economics

Commercial Education

These four technicians would teach part time in the junior high school. They would supervise instruction and have oversight of the special equipment for their special fields. They might also act as consultants in the elementary schools. When the senior high school was opened they would shift their major teaching responsibility to it and continue to act as consultants to other schools.

Following the principle of bringing in a minimum number of U.S. teaching technicians in fields where Liberian resources are least adequate and giving special attention to training teachers in these areas, it might be necessary to reinforce the work of these specialists considerably by the use of short-term staff members serving less than one calendar year.

II-c. Operation of the Senior High School. Beginning when a firm date can be forecast for the senior high school building to be completed and ready for occupancy within one month, and housing is available for new personnel.

Four technicians as follows, beginning approximately July 1, 1964 and continuing into Phase III. (Cumulative number in the project and final total, 49).

46. Specialist in Secondary School Administration.
Principal of the senior high school with immediate responsibility for all aspects of its operation, both sessions, including in-service activities carried on in the building.

47. Specialist in Curriculum and Supervision - Secondary.
Assistant principal of the senior high school with special responsibility for supervision of curriculum; close liaison with the in-service education program of the contract staff.

48. Specialist in Pupil Personnel and Guidance (Male).

49. Specialist in Pupil Personnel and Guidance (Female).

These two technicians would share responsibility for the pupil personnel services of the senior high school, especially the supervision of the counseling program and the training of teacher-counselors; close liaison with the in-service education program of the contract staff.

Short Term Staff Positions - Phase II. In addition to regular staff members listed above, it is anticipated that short term staff members might be needed, serving less than one year, especially for supervision and teaching in special fields (see p. 59). The range of specialties listed for Phase I (see p. 55) would also apply to Phase II. It is estimated that the number needed in any one fiscal year would not exceed the cost of three regular staff positions.

Phase III. Transfer of Administrative Responsibility.

This phase should be marked by a thorough appraisal of the school system, especially its administrative and supervisory structure. The appraisal should consider the extent to which the needs of operation and in-service education justify the continuation of the heavy supervisory staffing which was necessary to bring the system into operation. Appraisal should also take account of administrative, supervisory, and training needs caused by any expansion of the school system beyond the original seven buildings.

When, following appraisal, appropriate modifications had been made in the administrative and supervisory structure, including the policy board, contract personnel should be transferred as rapidly as possible to advisory roles preparatory to their withdrawal. It is recognized that in some positions responsibility could be transferred earlier than in others and that the duration of the U.S. advisory role would be greater or less in different positions.

In general, it is anticipated that lower echelon positions would be transferred earliest and that in these positions contract personnel might be withdrawn most rapidly.

Phase IV. Final Withdrawal of Contract Personnel.

Estimates for withdrawal of contract personnel during the last phase must be regarded as extremely tentative. If the program as recommended moves smoothly, it should be possible to withdraw personnel more rapidly than the schedule below indicates. A rough estimate of phasing out ten positions a year, in those cases where it had not been accomplished earlier, may be made as follows:

Withdraw the following personnel: Chief of party, the administrative assistant to the chief of party, one specialist in school business administration, the remaining elementary curriculum specialist, the remaining three secondary curriculum specialists, the remaining two pupil personnel specialists, and the remaining health education specialist. (Positions 1, 2, 3, 4, 5, 7, 13, 14, 38, 47).

Fiscal 1971. The remaining school business administration specialist, the assistant superintendent for staff personnel, the assistant superintendent for instruction, the administrative assistant for staff personnel, the accounting and payroll officer, and the principals of the junior and senior high schools. (Positions 8, 10, 20, 21, 22, 39, 46).

Fiscal 1972. It might be desirable to keep on the city school superintendent and his administrative assistant during part or all of this year, withdrawing these last two people by the end of fiscal 1972. (Positions 18 and 19).

VI. BASIC AGREEMENTS AND CONDITIONS WHICH MUST BE MET

If the foregoing plan of technical assistance for the development of a consolidated school system for Monrovia is to be implemented by contract with a U. S. college or university, it is essential that the following points, which have been discussed in more detail earlier in this report, be made part of the basic agreement:

1. Adequate logistic support by United States Operations Mission/Liberia to U. S. technicians employed under the contract. This should include, in addition to housing for technicians and dependents, adequate office space, furniture and equipment for offices, office supplies, and adequate vehicles for transportation directly under the control of the Chief of Party of the contract group.
2. Adequate operating budget as part of the contract to provide necessary supplies, curriculum materials, books and equipment, and clerical assistance as may be necessary to carry on an in-service training program for Liberian teachers and related school personnel.
3. Firm agreement by the Government of Liberia in relation to the following points:
   a. To acquire immediately adequate school sites for five elementary schools with capacities for from 300 to 500 children, for one junior high school with a capacity of 1,000 students, and for one senior high school with

a capacity of 500 students. Until such sites are acquired, the building program cannot go forward and it will not be possible to carry forward plans for the development of Monrovia Consolidated School System.

b. To budget specifically to the Department of Public Instruction on a continuing basis beginning in 1962 the operating costs for the new Monrovia Consolidated School System. A minimum of $50,000 should be appropriated in 1962 and a minimum of $750,000 in 1963. This $750,000 is a minimum which may need to be increased if more than marginal teacher salaries are to be paid. It is also essential that the Government of Liberia increase annual appropriations for this operating expense as the school system expands.

c. To assure that the Superintendent of Schools for the Monrovia Consolidated School System employed under the contract Chief of Party be given operational and administrative control, including budget and fiscal matters and employment and retention of personnel. In addition, he should have responsibility for curriculum and program development in cooperation with the Department of Public Instruction. While this Superintendent would report to the Secretary of Public Instruction, it is also essential that a policy board be established whose membership includes the Secretary of Public Instruction of the Government of Liberia, the Chief Education Adviser of the United States Operations

Mission/Liberia and the Chief of Party of the college or university contract, to establish policies and operating procedures for the school system.

VII. SUMMARY RECOMMENDATIONS

In the opinion of the survey team the establishment of a consolidated school system in Monrovia as outlined in this report is a feasible project. The team recommends that such a project be put into operation by appropriate commitments of the United States Government and the Government of Liberia and the execution of contracts for construction of school buildings, research and planning, in-service training, and operation of the school system.

An intensive effort is necessary. The proposals set forth in the report -- five elementary and two secondary school buildings, and forty-nine contract technicians plus short-term staff -- are a carefully considered estimate for a project which can be reasonably expected to move forward and become self sustaining without undue delay.

An effort of less intensity would mean dilution of the efforts of U. S. professional personnel in dealing with problems that are at present complex and disorganized. Without intensive aid, development of a city school system administered by trained and experienced Liberian personnel would take many more years than the time envisaged in this report. In the world of 1961, Liberia does not have the time.